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ABSTRACT

This annual publication contains summaries of more than 1,100 reading research reports that appeared in print between July 1, 1978 and June 30, 1979. The summaries are arranged into six major categories. The first category contains a listing of other general bibliographies offering summaries of reading research, while the second category presents summaries of studies concerned with teacher preparation and practice. The third category contains summaries of reports concerned with the sociology of reading. The majority of summaries appear in the fourth category, which deals with the physiology and psychology of reading. Report summaries placed in the fifth category cover the teaching of reading, while the final category presents summaries of studies concerned with the reading of atypical learners. (FL)

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Summary of investigations relating to reading

July 1, 1978 to June 30, 1979

SAM WEINTRAUB, HELEN K. SMITH, NANCY L. ROSER
MICHAEL ROWLS and WALTER R. HILL

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Introduction ... vi

I. *Summaries of reading research* ... 3

II. *Teacher preparation and practice*

II-1 Knowledge, skills, and abilities ... 3
II-2 Attitudes toward reading ... 7
II-3 Preservice and inservice preparation ... 11
II-4 Administration and supervision ... 14
II-5 Teacher performance and practice ... 15
II-6 Reading habits ... 23
II-7 Characteristics and roles ... 24

III. *Sociology of reading*

III-1 Use of mass media ... 26
III-2 Content analysis of printed sources ... 34
III-3 Readability ... 60
III-4 Reading interests, preferences, and habits ... 62
III-5 Readership ... 65
III-6 Library use ... 66
III-7 Role and development of libraries ... 69
III-8 Social and cultural influences of reading ... 70
III-9 Literacy ... 75
III-10 History of magazines and newspapers ... 78
III-11 Newspaper and magazine publication ... 83
III-12 Book publication ... 85
III-13 Publication and history of juvenile books ... 87
III-14 Reaction to printed materials ... 89
III-15 Effects of reading ... 91
III-16 Research techniques ... 93

IV. *Physiology and psychology of reading*

IV-1 Physiology of reading 95
IV-2 Sex differences 99
IV-3 Intellectual abilities and reading 101
IV-4 Modes of learning 107
IV-5 Experiments in learning 111
IV-6 Visual perception 134
IV-7 Auditory perception and reading 139
IV-8 Reading and language abilities 141
IV-9 Vocabulary and word identification 152
IV-10 Factors in interpretation 166
IV-11 Oral reading 179
IV-12 Rate of reading 185
IV-13 Other factors related to reading 187
IV-14 Factors related to reading disability 193
IV-15 Socio-cultural factors and reading 205
IV-16 Reading interests 209
IV-17 Attitudes and affect toward reading 214
IV-18 Personality, self-concept, and reading 216
IV-19 Readability and legibility 223
IV-20 Eye movement studies 225
IV-21 Studies on the reading process 227

V. *The teaching of reading*

V-1 Status of reading instruction 230
V-2 Comparative studies 231
V-3 Early reading 233
V-4 Reading readiness 234
V-5 Teaching reading—primary grades 237
V-6 Teaching reading—grades 4 to 8 241
V-7 Teaching reading—high school 249
V-8 Teaching reading—college and adult 251
V-9 Teaching materials 258
V-10 Teaching—grouping 266
V-11 Corrective and remedial instruction 268
V-12 Teaching—bilingual 278
V-13 Tests and testing 279
V-13a Test Taking performance 279
V-13b Predictive studies 281
V-13c Cloze testing and usage 287
V-13d Content analysis of tests 292
V-13e Test reliability and validity 293
V-13f Competency testing 298
V-14 Instructional time 298
V-15 Trends in reading 299
V-16 Television and reading instruction 299

VI. *Reading of atypical learners*

VI-1 Visually handicapped 300
VI-2 Hearing impaired 301
VI-3 Mentally handicapped 304
VI-4 Multi-handicapped 307
VI-5 Other atypical learners 308

Index 311

The Summary—a new home

The publication of this year's annual summary marks several significant changes in its long history. This issue is the first appearance of the summary as a separate monograph since the publication of the original summary. In 1925, the late Dr. William S. Gray authored the *Summary of Investigations Relating to Reading* (Supplementary Educational Monograph No. 28, University of Chicago Press). In that publication, Dr. Gray identified and abstracted over 400 research reports conducted prior to 1925. From 1926 to 1932, successive yearly summaries appeared in the *Elementary School Journal.* Annual summaries then were published in the *Journal of Educational Research* from 1933 until Dr. Gray's death in 1960. At Dr. Gray's death, Helen M. Robinson assumed the authorship of the summary, and it appeared in *The Reading Teacher* from 1961 to 1964. Beginning with Volume I, No. 2, the summary was published each year as a single issue of the *Reading Research Quarterly* until last year. Dr. Robinson remained its major author and editor until her retirement from the University of Chicago in 1968.

Last year, IRA's Board of Directors voted to support the work of the summary as a separate publication beginning with this issue. This monograph is being mailed to all *Reading Research Quarterly* subscribers as well as to all IRA comprehensive members. If the support for the summary continues, it will be mailed to all comprehensive members, but others will have to purchase it separately.

The current issue is unusual in that it contains over 1100 published reports of reading research. That number is about double the entries appearing in last year's summary and is by far the greatest number ever to have been identified within a single summary. The reasons behind this increase are interesting to speculate upon.

First, although the psychology section remains by far the largest category, the growth in published research is not in that section alone. All areas appear to have increased in the number of reports being produced. Thus it would seem that there is a dramatically increased interest in the field of reading. That interest may be the result of the availability of more funds in certain areas. For example, the Center for the Study of Reading at the University of Illinois turns out a considerable body of research literature. Many of the reports from the Center appear in other than in-house publications and are, therefore, included in the annual summary. Thus the large faculty on and affiliated with the Center are essentially being funded to conduct research and their productivity is one of the reasons for this year's large number of entries.

The increase in published reports also suggests the tremendous interest in reading by allied professions. Psychology, child development, linguistics, optometry and ophthalmology, journalism, sociology—these are but a few of the areas in which researchers are investigating aspects of reading. Any increase in numbers of individuals in those fields and in the research productivity of those persons would tend to spill over into the reading field.

In addition, one cannot help but wonder if some of the increase in published research is not a by-product of the growing need on the part of younger professionals to publish. Standards for achieving tenure are more stringent than ever, and positions are more difficult to come by. Whether it is spelled out or not, the major consideration for advancement in rank and pay at many institutions (if not most) is publication in a refereed journal. No tabulation has been made of whether the majority of entries in the summary come primarily from junior faculty members, but the number of first time names is impressively large. In an era when jobs are scarce and retrenchment is the norm, we may be seeing the results of the publish or perish phenomenon carried to the nth degree.

There is another factor that enters into the size of this year's summary. It's the human element. The identification of research reports for the summary is dependent upon the competence and conscientiousness of a doctoral student who serves in that capacity. With only one or two exceptions, all the students who have acted through the years as graduate assistants with the summary have been dedicated, able individuals. As a group, they have enjoyed their experience and have felt that they have learned a great deal. They come out with a better understanding of the vast dimensions of the field than do their fellow students. The graduate assistant for this summary was Jill Whaley who completed her doctorate in August, 1979, and is now on the faculty of the University of North Carolina at Chapel Hill. It takes nothing away from others who have worked on the summary to state that Dr. Whaley is a special person who undertook her assistantship as she does everything—with the utmost thoroughness, seriousness and dedication. If the research existed in print, she found it. The dramatic increase in this summary is thus to some extent attributable to Dr. Whaley's conscientious efforts. Although her help is acknowledged in a footprint on the abstract and title page, it seems only fitting that very special attention should be called to her.

It is, of course, difficult to pinpoint with any degree of accuracy, all the reasons behind an occurrence. It is quite possible that the increase in entries this year is simply a freak event and that the number will drop and a slower, more gradual rise in the number of research reports identified will be the rule as it has been in the past. Or it may be that the decade of the '80's will see an explosion of research in reading virtually unthinkable a short ten years ago. If the latter, and if the questions asked are insightful and the research well conceived and carefully executed, then 1990 should find us with many more answers to the important questions we need to answer.

Sam Weintraub

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The International Reading Association attempts, through its publications, to provide a forum for a wide spectrum of opinion on reading. This policy permits divergent viewpoints without assuming the endorsement of the Association.

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*Summary of investigations relating to reading July 1, 1978 to June 30, 1979**

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SUMMARIZES over 1100 reports of reading research published between July 1, 1978, and June 30, 1979. The research studies are categorized into 6 major areas, 5 of which have been further subcategorized. The majority of studies reported were classified into the Physiology and Psychology of Reading area. Large subdivisions under that major category include the following: Experiments in Learning, Reading and Language Abilities, and Vocabulary and Word Identification. Under the Teaching of Reading category, the Testing subcategory remains one of the larger divisions. A large grouping of studies in the Sociology of Reading is concerned with the content analysis of printed materials. A listing of other general bibliographies of reading research appears as the first major category of the present summary.

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Sommaire des investigations au sujet de la lecture du premier juillet 1978 au 30 juin 1979

PLUS DE 1100 comptes de recherche faite dans le domaine de la lecture, publiés entre le premier juillet 1978 et le 30 juin 1979, sont résumés dans ce sommaire. Des études se rangent en 6 catégories principales, dont cinq se sont divisées en catégories secondaires. La plupart des études était classée dans la section intitulés Physiologie et Psychologie de la Lecture. Les subdivisions majeures dans cette catégories comprennent les suivantes: des Expériences d'Apprentissage, 'Habilité dans le Domaine de la Lecture et du Language, et 'Identification de Mots et de Vocabulaire. Une des plus grandes divisions dans la catégorie d'Enseignement de la Lecture reste celle de Testing. Le vaste groupement des études intitulé Sociologie de la Lecture traite de l'analyse du contenu des imprimés. La première catégorie principale de ce sommaire-ci est la liste des autres bibliographies générales concernant la recherche dans le domaine de la lecture.

Resumen de investigaciones relacionadas con la lectura del primero de julio de 1978 al 30 de junio de 1979

MAS DE 1100 informes de investigaciones relacionadas con la lectura, publicados entre el primero de julio de 1978 y el 30 de junio de 1979, son resumidos en este anuario. Las investigaciones son ordenadas por 6 categorías principales, de que se dividieron cinco en categorías secundarias. La mayoría de los informes fue clasificada en la sección titulada Fisiología y Psicología de la Lectura. Las subdivisiones mayores de esta categoría comprenden las siguientes: Experiencias en el Aprendizaje, Habilidad en la Lectura y en el Lenguaje, e Identificación de Palabras y de Vocabulario. Una de las más grandes divisiones en la categoría de Enseñanza de la Lectura es la de Examenes. Una gran collección de los estudios sobre la Sociología de la Lectura se concierne del análisis del contenido de los impresos. La primera categoría principal de este anuario es una lista de otras bibliografías generales sobre la investigación relacionada con la lectura.

I. Summaries of reading research

In keeping with the practice initiated in last year's summary, this section contains only general summaries of reading research. Summaries of specific research areas are to be found in the appropriate subcategories.

Dieterich, Daniel J. Annotated bibliography of research in the teaching of English. *Research in the Teaching of English,* May 1979, *13,* 169-191.

Summarizes recent research in the teaching of English. Presents six categories of research.

Goodacre, Elizabeth J. *Reading research 1977.* Reading, Berks, England: Centre for the Teaching of Reading, University of Reading, 1977.

Summarizes reports on reading. Includes references for articles, books, booklets, brochures, and research projects.

Goodacre, Elizabeth J. Reading research in Great Britain—1978. *Reading,* April 1979, *13,* 4-12.

Overviews and categorizes reading research in Britain for the year 1978.

Summers, Edward G.; Forester, Anne; & Jeroski, Sharon. 1975-1976 review of research in college-adult reading. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978. 250-285.

Summarizes research in several areas of college-adult reading.

Weintraub, Sam; Smith, Helen K.; Plessas, Gus P.; Roser, Nancy L.; & Rowls, Michael. Summary of investigations relating to reading July 1, 1977, to June 30, 1978. *Reading Research Quarterly,* 1978-1979, *14*(3), 287-466.

Annotates published research reports in reading.

II. Teacher preparation and practice

II-1 Knowledge, skills, and abilities

Jongsma, Eugene A. The effect of training in miscue analysis on teachers' perceptions of oral reading behaviors. *Reading World,* October 1978, *18,* 85-90.

Assesses the effect of training in miscue analysis procedures on teachers' attitudes toward oral reading miscues. Subjects were twenty-three experienced teachers enrolled in a graduate diagnostic and remedial reading course. In an attempt to determine if the subjects were more sensitive to students' reading strengths after training, a pretest-posttest design was used: The same taped sample of pupil oral reading was played before training and six weeks later. The teachers' written comments were classified as either: 1) descriptive comments; 2) negative inferences (alluding to the reader's weaknesses); and 3) positive inferences (alluding to the reader's strengths). While the percentage of negative inference statements remained about the same after training, the percentage of positive inferences doubled. The difference between the proportion of positive inferences before and after training was statistically significant ($p < .001$).

ALLINGTON, RICHARD L. Teacher ability in recording oral reading performance. *Academic Therapy,* November 1978, *14,* 187-192.

Measures fifty-seven teachers' abilities to record oral reading performance as a function of their professional preparation and teaching experience. An audiotape instructional sequence on recording oral reading performance was provided all subjects. All subjects then listened to a 155-word audiotaped selection and attempted to record each of the reader's deviations from the graphic information. The scoring system was based upon the accuracy of the subject's protocol: Type 1 errors were those in which the subject failed to note a verbal behavior; Type 2 errors were those behaviors that were noted, but which did not occur on the tape. Type 1 errors were ten times more frequent than Type 2. The average proportion of error for all teachers was 28 percent. Subjects did not differ significantly on mean error scores when compared by previous training in recording oral reading performance, by amount of college coursework in reading, by years of teaching experience, or by grade level taught (primary vs. intermediate). The data suggested that neither training nor experience had a significant effect upon a teacher's ability to record oral reading performance.

HORNE, MARCIA D. Do learning disabilities specialists know their phonics? *Journal of Learning Disabilities,* November 1978, *11,* 580-582.

Examines the phonic competency of sixty-two teachers from three New England colleges enrolled in graduate level learning disabilities courses. The subjects, ranging in ages from 21 to 50 and in years of teaching experience from 0 to 20, were assigned to three groups and administered a 50-item phonics quiz. Because of lack of significant differences between groups, the data were pooled and the effects of age, experience, and current teaching assignment were investigated. Again, there were no significant differences. Group I correctly answered approximately 67 percent of the total items; Group III answered 62 percent. Group II did not complete the entire test, but the group answered 64 percent of the questions on consonants, 65 percent on vowels, and 80 percent on syllables. The author stated that learning disability specialists may be similar to regular classroom teachers in their knowledge of phonics.

RAMIG, CHRISTOPHER J.; & GRANGER, ROBERT C. Teacher inferences of the characteristics of non-standard speaking readers. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978. 20-26.

Investigates whether the presence of Black dialect syntactic features in oral reading affects teachers' perceptions of the reader's ability. Subjects were eighty-four graduate students (M=4; F=80; white=68; black=15; and Asian=1) enrolled in three sections of a course in reading methods and materials. Four variations of a text were constructed ("good" reader versions in both Black and standard English, and "poor" reader versions in both) with each variation containing fifteen changes from the original text but differing in the proportion of meaning-changing vs. non-meaning changing miscues. Three standard English and three Black dialect adult female readers audiotaped each version, reading both a good reader version and poor reader version of the text. Subjects listened to each of four tape recordings of the same selection and completed a 10-item, 5-point bipolar adjectival scale to rate the reader, and then rank ordered the readers from best to poorest. Ratings and rankings were analyzed separately. Good readers as a group were rated and ranked more positively than poor readers. The poor readers were not ranked differently from one another regardless of dialect. However, standard English good readers were rated and ranked significantly higher than Black English good readers.

MILLER, JOHN W. Teachers' abilities to judge the difficulty of reading materials. *Reading Horizons,* Fall 1978, *19,* 151-158.

Investigates the effects of training and experience in teaching reading on 100 teachers' accuracy in and criteria used for making judgments about the difficulty of reading materials. Four groups, representing four levels of experience were assigned: 1) undergraduates with no training and no experience; 2) certified elementary teachers with one 3-hour reading methods course and one to three years of teaching experience; 3) certified teachers having one 3-hour reading course and four or more years experience; and 4) reading specialists with twelve or more hours training and more than two years experience. All subjects rated six reading passages by difficulty level and responded to a questionnaire pertaining to the importance of various criteria for judging difficulty (individual words, syntactic complexity, and general stylistic patterns). There were no significant differences in the mean number of correct judgments of difficulty levels for the four groups. Undergraduates with no training or experience were the most accurate judges while teachers with four or more years experience were least accurate. Results from the questionnaire indicated there were significant differences placed on two criteria for judging difficulty: the importance of syntactic complexity and importance of general stylistic patterns. These differences appeared to be an effect of experienced teachers' and specialists' placing higher value on all the factors.

ROGERS, JOANN V. Media competence of teachers: a review of measurement research. *Educational Technology,* October 1978, *18,* 16-22.

Reviews research methodology for measurement of teachers' ability to retrieve and use various types of media, including printed materials.

ZAIS, ROBERT S. The decline of academic performance in the classroom and the reading scores of prospective teachers: some observations. *The High School Journal,* November 1978, *62,* 52-57.

Measures the reading skills of 387 university seniors in secondary education programs in an attempt to compare their scores with those of a norm group of 18,458 college freshman. Subjects were given the *Diagnostic Reading Tests: Survey Section,* Upper Level. A comparison of mean scores and mean percentile ranks for the prospective teachers and the sample population of freshmen in total reading, rate, vocabulary and comprehension indicated that prospective secondary teachers (as seniors) read only slightly better than average college freshmen. Yet when the scores were examined in each quartile, one-third of the seniors performed above the seventy-fifth percentile rank, and nearly two-thirds were above the mean. A smaller proportion (15.2 percent) was in the lowest quartile. When subscores were examined, 4.19 percent of the prospective teachers had attained the uppermost quartile in comprehension, 48.6 in rate, and 33.6 in vocabulary. When the fifty-nine poorest readers were eliminated for data analysis, the increase in above-the-mean scorers suggested the disproportionate negative effect of the low scorers on group performance.

FENWICK, GEOFF; & EVANS, GEOFF. An analysis of story reading skills. *Reading,* July 1978, *12,* 22-29.

Attempts to describe factors which contribute to effectiveness in reading aloud children's stories. First, second, and third-year education students were videotaped during storyreading sessions over a 2-year period. In later sessions, practicing teachers were included. The readers prepared to read poetry, stories, and/or story extracts and could select a taping situation with no audience, only colleagues, or groups of children. Characteristics of readers which the experimenters observed and judged to be effective included: 1) selecting appropriate material; 2) rehearsing and preparing for the session; 3) performing well; and 4) evaluating the selection with children.

DAVIS, M. Aspects of reading: a survey of attitudes. *Remedial Education,* 1977, *12* (4), 187-190.

Reports results of a semantic differential designed to gather data on the utility of the term *dyslexia* and on the concept of formalized screening to identify likely reading failures. The instrument was administered to 177 infant, junior and remedial teachers, educational psychologists, and headteachers of infant and junior schools in Cheshire. Items were bipolar adjectival descriptions representing three main factors: a) evaluation; b) potency, and c) activity. On the most productive continuum (good-bad), junior teachers were most positive about dyslexia as an explanatory concept; educational psychologists, least positive. Infant and junior teachers in primary schools viewed infant formal screening as "bad." Both psychologists and remedial teachers were divided in their evaluation of screening. Headmasters in infant schools were decidedly negative. All groups viewed positively later screening (6 years, 3 months). Remedial teachers (73 percent) gave the most favorable rating. Group perceptions are characterized and presented.

ARTER, J. A., & JENKINS, J. R. Examining the benefits and prevalence of modality considerations in special education. *The Journal of Special Education,* Fall 1977, *11,* 281-298.

Addresses the modality model, which maintains that certain exceptional children are primarily auditory or visual learners. A review of the literature disclosed no study that demonstrated beginning reading instruction can be improved by modality and instructional matching. It was noted that textbook authors, nevertheless, often recommend that teachers modify their instruction in accordance with modality. A survey of Illinois special education teachers revealed that 87 percent of the respondents reported familiarity with the modality model, and of these, 95-96 percent believed both that research supports the model, and that they obtained better results when they modified instruction accordingly. Implications for teacher training and educational practice were considered.

NARANG, HARBANS LAL. Factors associated with teachers' knowledge of reading at the secondary level. *Saskatchewan Journal of Educational Research and Development,* Spring 1978, *8* (2), 34-39.

Investigates the factors associated with secondary teachers' knowledge of reading. An instrument assessing teacher knowledge of reading, including general background, reading skills, instructional strategies, and measurement and evaluation was administered to 124 inservice and sixty-four preservice teachers at the University of Oregon. Results of t-tests to determine significance of difference between groups revealed that inservice teachers scored significantly ($<.05$) higher than preservice teachers and that individuals who had taken reading courses achieved significantly higher than those without coursework. No significant differences were found between scores of males and females or between junior high and senior high teachers when group means were compared. A one-way ANOVA comparison revealed no significant effect of teaching experience on the variance in teacher knowledge of reading. Neither did major teaching field significantly contribute to teachers' knowledge of reading.

II-2 Attitudes toward reading

SMITH, ARTHUR E. Attitudes of British and American teachers toward reading instruction. *Reading World,* October 1978, *18,* 13-21.

Examines the attitudes of twenty-four American and twenty-eight British teachers toward curriculum and approaches to teaching, with particular emphasis on reading instruction. A 24-item survey containing statements related to instructional aspects of reading and language was administered to teachers of children aged 9 to 11. Responses were made on a 5-point Likert-type scale ranging from "Strongly Agree" to "Strongly Disagree." A significant correlation coefficient (.73) was determined to exist between attitudes of British and American teachers. Survey items on which the two groups most frequently indicated agreement or strong agreement included: that children should read independently daily, that children should be given specific instruction in content-area reading, and that almost all schools have need for a special reading teacher. Results of a chi-square analysis revealed significant differences between respondents on seven statements. Examples included: 51 percent of the American teachers as contrasted with 11 percent of the British strongly agreed that every child should achieve a designated competency level before leaving secondary school. Half of the British teachers felt that television viewing had no significant effect on children's reading abilities. Only 9 percent of American teachers felt there was no effect.

WILSON, LAVISA CAM. A comparison of preservice and experienced teachers' perceptions of competence in teaching reading. *Reading World*, December 1978, *18*, 194-197.

Compares fifty-six preservice and thirty-three experienced teachers' perceptions of their ability to teach reading. A checklist of teacher competencies was completed either after an undergraduate methods course or during the first session of the inservice teachers' first graduate reading course. Differences between group means were significant. Preservice teachers rated themselves at a higher level of competence than did experienced teachers. Preservice teachers felt most competent in the categories of knowledge of reading terms, structural analysis, and reading comprehension. Experienced teachers felt most confidence with reading comprehension. The researcher felt it was the preservice teachers' perceived mastery of course content, yet limited involvement with children, that inflated their feelings of competence.

ROBINSON, RICHARD D.; GOODACRE, ELIZABETH J.; & MCKENNA, MICHAEL C. Psycholinguistic beliefs: a cross-cultural study of teacher practice. *Reading Improvement*, Summer 1978, *15*, 134-137.

Presents the results of a cross-cultural study of psycholinguistic practices and beliefs among both preservice and inservice teachers in the United States (N=62) and England (N=83). Using an already existing set of statements, the authors developed a rating scale designed to tap subjects' feelings as to the importance of these statements for reading instruction. Results tended to support the researchers' contention that, for most of the respondents, the basic tenets of psycholinguistic thought are either unknown or in opposition to their current teaching practices. Yet, most preservice and inservice teachers agreed with the psycholinguistic principles that word-perfect reading was not a prime objective, that guessing should not be discouraged, and that teaching letters or words one at a time until mastery was unnecessary.

COPE, R. G.; & MORRIS, A. The attitudes of Australian secondary teachers toward reading. *Reading Education,* Autumn 1978, *3,* 16-23.

Describes results of a survey of 888 Australian secondary teachers' and principals' attitudes toward several aspects of reading instruction as measured by a 14-item inventory. A factor analytic method was used to determine "underlying dimensions" of the data. Independent variables were role (principal or teacher), system (government or nongovernment), state (or territory) and location (urban or rural). Results indicated a general positive attitude toward reading. Four underlying factors which accounted for 53 percent of the variance were the following concerns: 1) teachers are not equipped to teach reading; 2) students should learn everything about reading at primary levels; 3) all secondary content-area teachers should take responsibility for reading in their areas; and 4) not just remedial teachers should teach reading. There appeared to be a generally more supportive attitude toward reading in the content areas by principals.

DUPUIS, MARY M., & ASKOV, EUNICE N. Content area differences in attitudes toward teaching reading. *The High School Journal,* November 1978, *62,* 83-88.

Describes an experimental aspect of the Content Area Reading Project, an inservice training program designed to change the behavior and attitudes of junior high school teachers toward teaching reading as part of their content-area subjects. Fifty-eight teachers representing urban, rural, and suburban secondary schools and various content areas took part in workshops and follow-up consultations as they tried out workshop techniques. A comparison group of teachers in the same schools who were not in the workshop was also utilized. In addition, they had access to model materials, and to feedback concerning their performance and materials development. The teachers were pre- and posttested for knowledge of reading skills, attitude toward incorporating reading instruction into their content areas, and attitude toward sample teaching situations that incorporate reading instruction into content areas. Experimental teachers' gains were significantly greater than those of the comparison group. The authors concluded that reading teachers need to be taught skills for working with other teachers. Although English teachers were found to be the best prepared at workshop entry to deal with reading skills, their exit scores were no higher than that of other groups.

LIPTON, JACK P.; & LISS, JODY A. Attitudes of content area teachers towards teaching reading. *Reading Improvement,* Winter 1978, *15,* 294-300.

Presents responses of 111 junior high content-area teachers on a questionnaire designed to gather information about their attitudes and behaviors toward reading and the teaching of reading. Areas of inquiry included: 1) the extent of use of various types of reading material; 2) perceived importance of specific reading skills; 3) amount of time spent teaching reading; and 4) perceived role of the reading specialist. Results of one-way analyses of variance on each item (with the specific content area serving as the independent variable) revealed a great deal of variability among teachers in the use of materials. Perception of the importance of reading skills also varied widely. The percentage of time devoted specifically to reading instruction was significantly different among the content areas, with physical education (4 percent), mathematics (10 percent) and science (11 percent) the lowest, and foreign language (64 percent), English (66 percent), and special education (70 percent) the highest. P.E. and fine arts teachers were least favorable in their attitudes toward the possible benefits of teaching specific content reading skills for their courses. Foreign language and English teachers were most positive. The perceptions of reading specialists' roles produced considerable agreement with the exception of the task of assisting teachers to develop classroom reading programs. Vocational arts educators were least favorable toward this role; English teachers were most favorable.

USOVA, GEORGE M. Analysis of attitudes toward reading among secondary content-area teachers. *The Clearing House,* September 1978, *52,* 22-24.

Assesses the attitudes of secondary content-area teachers toward the teaching of reading. One-half of the secondary districts in the state of Pennsylvania (N=256) were randomly selected for investigation and sent a 20-item, Likert-type attitude scale to be directed to a teacher in a content area (English, science, history or math). Scoring of the instrument was determined by the degree to which respondents agreed with authorities in the field of reading instruction. Results of a one-way ANOVA indicated that there were significant differences ($p < .05$) in attitude toward reading instruction among secondary teachers in four content areas. A Sheffé technique for pair-wise comparisons revealed that the English and history teachers combined scored a more favorable attitude toward reading instruction than did math teachers.

SWINDLING, JAMES A. Attitudes of community college instructors toward reading: a process for change. In Gwyn Enright (Ed.), Personalizing learning systems: ecologies and strategies. *Proceedings of the Tenth Annual Conference of the Western College Reading Association,* 1977, *10,* 42.

Examines the attitudes of seventy-nine community college instructors from one institution toward the teaching of reading in the academic areas. Instructors responded to a 14-item attitude inventory which attempted to identify perception of their role in teaching reading in their academic area, their preparation and ability to teach reading, the degree of enjoyment experienced while teaching reading skills, and their view of the role of the reading specialist at the community college. The instructors surveyed did not differ significantly in attitudes toward reading. In general, they did not feel responsible for the teaching of reading, felt a lack of confidence in their ability and desired more training/material related to teaching reading, did not view negatively the prospect of teaching reading skills, and believed the reading specialist to be an important part of the community college faculty.

II-3 Preservice and inservice preparation

CHALL, JEANNE S. Personnel for the teaching of reading and its improvement: preparation and availability. In John B. Carroll and Jeanne S. Chall (Eds.) *Toward a literate Society: a report from the National Academy of Education.* New York: McGraw-Hill, 1975. 45-57.

Reviews surveys and other research data relative to the education and availability of various categories of personnel involved in teaching reading. Includes classroom teachers, reading specialists, administrators, researchers, college personnel, and paraprofessionals.

ARTLEY, A. STERL. The education and certification of elementary and secondary teachers of reading. *Journal of Research and Development in Education,* Spring 1978, *11,* 34-43.

Addresses several issues concerning teacher preparation. Draws extensively from the findings of two major studies of the preparation of reading teachers.

TENNESSEE EDUCATION ASSOCIATION. The problems of teaching reading in Tennessee. *Tennessee Teacher,* February 1977, *44,* 9-21.

Reports a summary of results of a questionnaire survey of 128 Tennessee elementary classroom teachers' perceptions of problems they confronted teaching reading. On issues related to college training, state certification requirements, and inservice training, general conclusions were that: 1) college curriculum and course requirements are not adequate; 2) state certification requirements are inadequate; 3) inservice training needs improvement; and 4) teachers do take additional college courses. On questions dealing with teaching methods, classroom management, and teacher aides, a majority of respondents indicated that: 1) phonic training is inadequate; 2) a "return to basics" is important; 3) ability grouping may help; 4) teacher aides can help but not compensate for large classes; and 5) discipline can be a problem. Teachers' impressions of the curriculum were that too many subjects are taught in the elementary school. While the majority of teachers (N=95) agreed that teaching remedial reading requires special training, about half felt that remedial programs should be a part of the regular program. Almost 79 percent felt that achievement tests were not reliable measures of student progress and nearly all agreed that student achievement tests were not good estimates of teacher performance. Other areas of data collection included personnel management, class size, facilities, supplies and texts, and detrimental influences on education both inside and outside school.

ZIRKEL, PERRY A.; & ALBERT, VICTORIA F. Assessing teachers' preferences regarding in-service education. *The Clearing House,* March 1979, *52,* 328-333.

Reports on the results of a questionnaire developed to identify important incentives in inservice training for 228 teachers in a Teacher Corps project. The survey instrument titled Preliminary Log for Assessment of Needs was distributed to the staffs of twelve Title I schools. Overall, the teachers attached the highest priority to the content of inservice offerings. The preferred areas were reading, teaming, values clarification, motivation, bilingual education, and conversational Spanish. "Home-school relations" received the lowest, although a positive, rating. The time inservice programs are offered was the second priority; the respondents preferred during or directly after school. Format, credit, and money formed a group of intermediate incentives. Location or place of training was the lowest rated priority.

CAMPBELL, RICHARD L. A comparative study of the effectiveness of process skills instruction on reading comprehension of preservice and inservice elementary teachers. *Journal of Research in Science Teaching,* March 1979, *16,* 123-127.

Investigates the effect of training seventeen inservice and twenty-seven preservice teachers in science process skills on those teachers' reading comprehension scores. Both groups were enrolled in science methods courses at Florida International University and completed self-instructional exercises pertaining to science process skills (the Basic Science Process Skills and the Integrated Science Process Skills). Pretests and achievement tests (posttests) were administered for both programs. In addition, two forms of the *Nelson-Denny Comprehension Test* served as the measure of reading change. A repeated-measures ANOVA revealed no significant differences between groups on the *Nelson-Denny* scores prior to or after treatment. There were, however, significant increases for both groups on the reading comprehension post-test scores.

ASKOV, EUNICE N.; DUPUIS, MARY M.; & LEE, JOYCE W. An effective inservice model for content area reading in the secondary schools. In P. David Pearson & Jane Hansen (Eds.), Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978. 6-12.

Reports results of an inservice education program designed to affect junior high school teachers' attitudes toward teaching reading in the content areas and to effect changes in classroom practice. A competency-based format was selected for a year-long program of bi-monthly sessions. Only teacher variables were considered in the evaluation design. Two pre- and post-treatment attitude measures were administered to the trained group and to a comparison group of teachers who worked in the same schools. The *Purdue Teacher Opinionaire* (PTO), a measure of satisfaction with the teaching situation, was administered to control for attitude changes due to factors other than the project. Experimental teachers' gains on the attitude measures were significantly greater than the gains of comparison teachers. No significant effect was found on the PTO. Of the fifty-six workshop teachers who took a criterion-referenced knowledge of reading skills test, three achieved a mastery level of 80 percent prior to training and twenty-two reached the mastery level on the posttest. Rating systems employed to determine the degree to which the teachers incorporated reading skills in their classrooms were significantly higher at the exit level.

ROSENSHINE, BARAK, & MEYERS, LINDA. Staff development for teaching basic skills. *Theory Into Practice,* June 1978, *17,* 267-271.

Proposes a "direct instruction" model which can form the basis for inservice teacher training in teaching reading and math. The model is derived from recent correlational studies and is supported by some experimental studies.

LAMBERG, WALTER J. Required preparation in reading for secondary teachers. *Reading Horizons,* Summer 1978, *18,* 305-307.

Surveys teacher certification officials in all states and the District of Columbia to determine the nature and extent of required preparation for secondary teachers in the area of reading instruction. Of the fifty-one agencies, fifty reported some type requirement. Twenty-three required three hours or more of course work; the maximum number required by any state was twelve hours. Two agencies required a demonstration of knowledge or competence but did not require course work. Respondents whose states had course requirements indicated that the emphasis in course work was on content-area reading.

LAPP, DIANE; REZBA, RICHARD; LAHNSTON, ANTON; & DUELFER, ARLENE. Is it possible to teaching reading through the content areas? *New England Reading Association Journal,* 1978, *13,* 20-25.

Presents results of an effort to train preservice teachers to integrate reading into content area instruction. A field-oriented competency-based teacher training program was designed for teaching twenty-two junior interns integration of reading/language skills as a base for content-area skills in social studies and science. A comparison field-based group (N=23) was trained in content area reading only by a reading/language arts instructor rather than by all methods instructors. Data were collected from both groups on measures of intern's performance and mastery of course material. Analysis of a Reading/Language Arts Pretest showed no initial differences between groups. Mean scores on the posttest reflected similar gains by both groups. There were no significant differences between groups on posttest items related to reading in specific content areas. No significant differences were found between the two groups on any performance or cognitive measure. Few of the interns were observed implementing content-area reading principles into lesson plans.

HENNEY, MARIBETH, & BOYSEN, VICKI. The effect of computer simulation training on ability to adminster an informal reading inventory. *The Journal of Educational Research,* May-June 1979, *72,* 265-270.

Examines the effect of computer simulation training on preservice elementary teachers' ability to correctly administer an informal reading inventory (IRI) and interpret it. A further purpose was to assess the sixty-two students' attitudes toward simulation-related experiences. After an in-class introduction to informal reading inventories with all trainees, the randomly selected experimental group received simulation training, then administered and interpreted an IRI with a child. The order of simulation and administration was reversed for the control group. On measures of correctness of procedures employed, and knowledge of IRI's, there were no significant differences between experimental and control group. However, the experimental group was able to identify correctly significantly more weaknesses than the control group and with greater group consistency. There was no significant difference between the two groups in their attitude toward the simulation; both groups rated the simulation lower in value than any other reading methods class activity listed on the survey.

Miller, John W.; & Rand, David C. Practical teaching experiences in reading for pre-service teachers. *Reading Improvement*, Winter 1978, *15*, 305-308.

Examines the effect of placement in one of three different practicum experiences on 183 reading methods students' knowledge of and attitudes toward teaching reading. All students completed twenty-two hours of practicum experience in either a regular classroom, in a special reading class, or in a university-based program. At the end of the semester, an examination over course content and an attitude questionnaire were administered. Differences were noted between groups for knowledge demonstrated and for several of the attitude items. Generally, students assigned to special reading classes exhibited more knowledge and more favorable attitudes toward the amount and quality of their practicum experience. Students in the university lab learned significantly more content than those with classroom teachers, but slightly less than those with special reading teachers.

II-4 Administration and supervision

Haggard, Martha Rapp, & Meeks, Jane Warren. What administrators actually know about reading programs. *Reading Horizons*, Spring 1979, *19*, 200-20[illegible].

Presents results of a survey of fifty-nine public school administrators in a Midwestern metropolitan area to determine the extent and depth of the respondents' attitudes, knowledge and concepts about reading programs. Questions dealt with personnel (teacher-pupil ratio, hours of training in reading, role of the reading specialist, etc.), content, evaluation, and priorities of the reading program. Among the finds was agreement (forty-four out of fifty-nine responses) that reading specialists should have a master's degree in reading. Most felt that the reading specialists should serve in multiple capacities. Thirty-four respondents indicated that the library was an integral part of the reading program. One-half of the respondents indicated that producing independent readers was the main goal of their district's program. Fifty-one of eighty-six responses to a question dealing with methods used to evaluate attainment of goals listed classroom observation and achievement tests, with achievement tests showing a slight lead. Thirty-seven administrators said that provisions were made for inservice training in their districts. The findings showed a discrepancy between elementary and secondary principals in courses in reading. Almost two-thirds of the secondary principals had had no classes in reading education; three-fourths of the elementary principals had between 2 and 12 hours of course credit in reading.

Harnage, Philip L. Managing the education technology. In Malcolm P. Douglass (Ed.) All things considered... Reading, the process of creating meaning for sensed stimuli, *Claremont Reading Conference 41st Yearbook,* 1977, 230-235.

Investigates the impact of mandated innovation on teacher attitudes as contrasted with other teachers who had choices in reading program implementation or freedom to select from among a variety of programs. A questionnaire designed to collect background information and reading habits, as well as attitudes toward educational theory and practice, was administered to 132 teachers representing four district groups: Group 1 (N=26) elected to teach a highly structured program; Group 2 (N=40) had neither mandated program nor highly structured program; Group 2 (N=40) was mandated a highly structured management system; Group 3 (N=40) had neither mandated program nor management system; Group 4 (N=26) was graduate education students at a California State University. The four subgroups showed a high degree of consistency in the background variables of age, sex, experience, education and grade levels. Fifteen items were reported for which differences between group means reached significance (< 05). In general, Group 2 was characterized as having the most negative responses to innovations (i.e. management systems, individualization, multicultural education) and was most positive in regard to punishment and teacher autonomy. The researcher predicted that reading programs imposed from without would not only fail but produce negativism and resistance among teachers.

Vance, Doug, & Quealy, Roger. Reading program legislation in Wisconsin. *Journal of Reading,* October, 1978, *22,* 28-32.

Surveys the reading program of every licensed reading teacher and each curriculum director in every school district in Wisconsin. In an effort to substantiate the need for pending state legislation in support of comprehensive reading programs, effective leadership, and a trained reading specialist in every district, the Wisconsin State Reading Association in cooperation with a state senator sponsored the survey. Results indicated that there was little consistency or coordination within districts without a reading specialist. Districts with specialists were more likely to give reading priority, achieve a consistent philosophy, offer staff development, and collect and distribute achievement data. The study's results were used to persuade legislators that coordination of reading is "essential... to provide quality instruction."

II-5 Teacher performance and practice

Lorentz, Jeffrey L., & Coker, Homer. Observed patterns of teacher-pupil classroom behavior as predictors of student growth in reading. In P. David Pearson & Jane Hansen (Eds.), Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978. 16-19.

Explores the relationship between observed classroom behavior within teacher-pupil interactions and student achievement in reading. Subjects were forty-one classroom teachers of reading (grades 3-8). Reading comprehension scores were available for all pupils. After the pretests had been administered, each of the approximately 1,200 pupils in the forty-one classrooms was observed on two separate visits with behavior recorded on an observation instrument scored to identify a school coping style (aggressive, passive, task-oriented, etc.). Six pupils with different coping styles were randomly selected from each classroom and used in six subsequent observations of teacher-pupil interaction on the Spaulding Teacher Activity Rating Scale (STARS), a category system which examines the teacher's instructional strategies as well as affective and control techniques. STARS consists of twenty-five categories of teacher behavior as they interact with nineteen categories of student behavior, yielding a 475-cell student/teacher matrix. The pretest and posttest reading scores, an SES measure, grade level and twenty-one STARS scores were the variables used. The pretest was the best predictor of posttest Reading (r=.81), accounting for nearly two-thirds of the variance. Several of the STARS scores were better predictors of reading achievement than was grade level or SES.

Southgate, Vera; Arnold, Helen; & Johnson, Sandra. The use of teachers' and children's time in *Extending Beginning Reading*. In Elizabeth Hunter-Grundin & Hans U. Grundin (Eds.) *Reading: Implementing the Bullock report*. London: Ward Lock Educational, 1978. 120-132.

Discusses the findings from the use of classroom observation schedules employed as part of a battery of techniques aimed at identifying processes affecting children learning to read. An intensive one-year study was conducted using thirty-four first- and second-year British junior school classes. The report focused on the use of teachers' and pupils' time. Two observation schedules, one referring to the teacher and one to the pupil, were developed. Generally, two observers worked in each classroom, and a total of thirty observers were utilized. The number of observations per teacher varied from three to nine; for sixty-eight children, a total of 195 observations were made, the number per child varying from one to eight. Actual time devoted to reading and writing was less than most teachers imagined it to be, outside interruptions were frequent and reduced the time spent on instruction, and interruptions by children themselves also reduced the time devoted to the task. Individual teachers switched attention from one child or group to another between ten and twenty-five times in a 20-minute period. Teachers' listening to oral reading averaged only thirty seconds per child. Teachers spent an average of 25 percent of their time on non-teaching activities. Children varied in the time spent that was task oriented and in their work patterns.

Rupley, William H. Teacher instructional emphases and student achievement in reading. *Peabody Journal of Education*, July 1978, *54*, 286-291.

Seeks to determine the effects of selected teacher instructional emphases on pupils' reading achievement. Teachers were identified as high-achieving or low-achieving based on whether their pupils' reading achievement test scores fell above or below predicted levels. The sixty-four grade 3 and 6 teachers thus identified were administered the *Survey of Teachers Emphases in Reading Instruction* questionnaire. No significant differences were found between the two groups of teachers on the seven subcategories of the questionnaire. There were, however, non-signficant differences suggesting that high achieving teachers placed greater emphasis on diagnosis and less emphasis on language development and oral reading than do low-achieving teachers.

ANDERSON, LINDA M.; EVERTSON, CAROLYN M.; & BROPHY, JERE E. An experiental study of effective teaching in first-grade reading groups. *The Elementary School Journal,* March 1979, *79,* 193-223.

Reports the efficacy of process-product research in the classroom and attempts to assess the effectiveness of a given treatment in promoting change in teachers' behaviors in a natural classroom setting. The treatment consisted of an instructional model made up of twenty-two principles for promoting effective small group instruction. A manual describing the principles was given to seventeen grade 1 teachers, while ten teachers served as controls. The ten controls and ten of the experimental teachers were observed regularly throughout the school year to note implementation of principles. At the end of the school year, reading achievement scores on the *Metropolitan Achievement Tests* for all pupils were collected and adjusted for entering readiness scores. The instructional model dealt with two aspects of instruction, group management and teacher feedback. The treatment-observed and treatment-unobserved groups had significantly higher adjusted achievement scores than the control group. A discussion of particular aspects of the treatment and the effects on teacher behaviors is presented. The relationship to achievement of components of the instructional model is also discussed.

PENG, SAMUEL S.; ASHBURN, ELIZABETH A., & GRAY, BOWMAN. Teacher affect in relation to pupil achievement. *The Journal of Teacher Education,* July/August 1978, *29,* 76-79.

Notes the relationship of positive and negative teacher affect with pupil achievement in reading and math, as perceived by pupils. Subjects were ninety-three sixth graders and eighty-nine fourth graders who were administered a 9-item multi-choice questionnaire to assess the degree of positive affect and a 7-item questionnaire to assess negative affect. Reading and math scores on the *Metropolitan Achievement Tests* were the criterion measures obtained. Positive affect consistently had a negative relationship with pupil achievement; the relationship between negative affect and achievement was inconsistent. The negative relationship between positive teacher affect and pupil achievement existed even when IQ was controlled.

MORRIS, JOYCE M. Children's reading achievement in relation to their teachers' attributes. In Elizabeth Hunter-Grundin & Hans U. Grudin

(Eds.) *Reading: implementing the Bullock report.* London: Ward Lock Educational, 1978, 123-144.

Reappraises the evidence on the relation of pupil achievement to teachers' attributes which was available to the British Bullock Committee. Also examines some post-Bullock research on the same issue.

Rich, H. Lyndall, & Bush, Andrew J. The effect of congruent teacher-student characteristics on instructional outcomes. *American Educational Research Journal,* Summer 1978, *15,* 451-457.

Utilizes a series of reading lessons in testing the hypothesis that pupils in congruent environments will outperform pupils in incongruent environments. The twenty teachers were identified as having direct or indirect teaching styles based on findings of the Flanders observational procedure. Pupils consisted of ninety-four fourth, fifth, and sixth graders (four to six in each classroom) identified as high or low on social-emotional development. Each of the twenty small groups met daily for twenty consecutive days for 15 to 30-minute reading lessons. Both observational and paper-pencil data were collected. Congruent means exceeded incongruent means on all variables. The effect was strongest for pupil affect, followed by achievement, followed by time at attention to task.

Buttery, Thomas J., & Powell, Jack V. Teacher verbal feedback during primary basal reading instruction. *Reading Improvement,* Fall 1978, *15,* 183-189.

Collects data on teacher verbal feedback during primary basal reading instruction to determine types and frequency of feedback and intra- and intergrade relationships between teacher questions and pupil responses. Subjects were eight grade 1 and eight grade 3 teachers who had taught at least three years at their respective grade levels. Teachers were subdivided into those who taught advanced groups and those who taught basic reading groups as determined by reading test scores. Audio recordings were made during reading instruction and the tapes analyzed by means of an investigator-developed instrument consisting of four broad categories and twenty-three subcategories. Frequency and percentage of overall feedback were tabulated. Nineteen types of verbal feedback with a predominantly affirmative tone were most frequently recorded. The frequency of questions asked seemed to be a function of the grade and group of pupils. Better readers were asked significantly more questions than poorer readers and better first graders more than better third graders. Basic third graders were asked more questions than basic first graders.

Winne, Philip H. Experiments relating teachers' use of higher cognitive questions to student achievement. *Review of Educational Research,* Winter 1979, *49,* 13-49.

Critiques and summarizes some experimental or quasi-experimental studies of the effects of teacher questions on student achievement. A few studies involving reading are included.

Borich, Gary D. Implications for developing teacher competencies from process-product research. *Journal of Teacher Education,* January/February 1979, *30,* 77-86.

Focuses on studies of the relationship between teacher behavior and pupil outcome. Includes some studies that investigated teacher characteristics and pupils' reading achievement.

Fox, Anne C.; & Franke, Mary. Learning centers: the newest thing in busy work? *Reading World,* March 1979, *18,* 221-226.

Evaluates, according to specific criteria for effectiveness, 766 teacher-made learning packets submitted by forty teachers (grades 1-6). The five criteria for excellence were derived by the authors after earlier examination of over 1,300 learning center packets. These criteria were: 1) materials should have a purpose, have clear directions, provide for feedback, be motivating and attractive, and be durable and functional. Of the the packets examined, 50.4 percent were rated as excellent; i.e., they met all five of the criteria. Of the remainder, 30.8 percent were judged acceptable but in need of modification, 14.8 percent were marginal, and 4 percent were unacceptable. The authors reported that two and one-half hours were usually spent in constructing a single learning packet.

Davis, Carol A. The effectiveness of informal assessment questions constructed by secondary teachers. In P. David Pearson & Jane Hansen (Eds.) Reading disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978. 13-15.

Applies procedures for evaluating the effectiveness of a set of experimentally generated, teacher-constructed informal reading inventory questions. Inventory passages, ranging in length from 250-350 words, were selected by experienced secondary teachers from four content areas: English/reading, social studies, science, and a miscellaneous group sampling vocational arts, fine arts, and mathematics. Two passages each at readability levels 5, 7, 9, 11, and 13, were selected and a set of ten teacher questions was constructed to accompany each. Passages and questions were administered to seventh, ninth and eleventh graders. The number of correct responses for each set of questions was subjected to a 3-way analysis of variance. Significant effects were found for passage, question type, and for interactions between grade and passages. Results of a difficulty and discrimination index revealed that while difficulty levels of questions were satisfactory across grade levels, the questions did not discriminate between high and low scoring students.

Bowling, Noel; Laffey, James; Muia, Joseph; Shaffer, Gary. Preservice teachers' perceptions of reading instruction. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978, 1-5.

Reports results of administration of an instrument, the Preservice Teacher Perception Questionnaire (PTPQ), designed to ascertain preservice teachers' perceptions of specific reading instructional practices that were used in classrooms when they were taught to read. At the beginning of spring semester, 1975, the PTPQ was administered to 110 preservice teachers enrolled in seven sections of an advanced undergraduate reading course. Responses were analyzed in order to check the soundness of the instrument as a diagnostic tool as well as for interpreting perceptions. All eighty-three items were judged to be explicit on the basis that less than 5 percent of the responses indicated that any one item was unclear. Items which reflected conceptually related teaching practices were perceived as occurring with similar frequency; however, conceptually opposite teaching practices were not necessarily perceived as occurring with reciprocal frequencies. Because of the variability of the responses, the instrument was judged effective in reflecting individual differences. When the eighty-three items were classified into six categories of instructional practices, and responses rank-ordered by perceived frequency of those practices, seven general instructional trends were suggested by the data: 1) communication of expectations for pupil performance; 2) management; 3) correction of inappropriate responses; 4) preparation for subsequent reading activities; 5) infrequent individualization; 6) infrequent diagnostic procedures; and 7) failure to communicate rationale.

DWORKIN, NANCY E. Changing teachers' negative expectations. *Academic Therapy*, May 1979, *14*, 517-531.

Tests hypotheses in three areas of teacher expectation: 1) the relationship between student performance and high or low teacher expectation; 2) the potential for changing teacher satisfaction from negative to positive; and 3) the effects on student achievement as a result of change in the teacher's level of satisfaction. Teachers from thirty-two primary classes in Washington, D.C., identified three children for whom their expectations were low and three for whom they were high. The teachers were randomly assigned to either an experimental or non-experimental group. A training program which focused the experimental group's attention to the success of educationally vulnerable children served as treatment. Teachers completed a *Dworkin Teacher Satisfaction Scale* for each child before and after intervention. Children's achievement gains were measured by the *Peabody Individual Achievement Test*. Although changes in student achievement were not significant, teacher's expectation differences for children about whom they were concerned and for those for whom they were not overtly concerned were significant at the .001 level. As a result of treatment, the experimental group teachers had significant changes in satisfaction scores and were significantly different from the control group in amount of positive change.

HOOD, JOYCE. Is miscue analysis practical for teachers? *The Reading Teacher*, December 1978, *32*, 260-266.

Suggests that miscue analysis may be valuable for the researcher and clinician, but too time-consuming for the teacher and that shorter estimates of reading ability seem to work almost as well in the classroom. Some research using miscue analysis is discussed.

Adelman, Howard S. Diagnostic classification of learning problems: some data. *American Journal of Orthopsychiatry,* October 1978, *48,* 717-726.

Collects data from reading diagnosticians on the process by which they arrived at their diagnosis and categorizes the fifteen children diagnosed on the basis of how they were labelled. First, information was obtained from families relative to any labels that had been applied to children. This was followed up with a request for information from the diagnostician and a structured questionnaire listing categories the diagnostician was thought to have used in arriving at the diagnosis and asking for verification. Diagnoses were divided into those primarily based on test findings and those primarily based on behavioral observations. These were then further divided into two groupings each: consistent or contradictory test pattern of findings and observations from one exam session or a number of evaluation sessions. While a number of labels had been applied, there was little agreement regarding either the label that should be assigned or its meaning. Only one of the fifteen diagnoses resulted from a consistent pattern of test data. Nine of the fifteen diagnoses were not based on any positive test findings; the majority of these were from observational data often unsystematically collected. Five of the fifteen diagnoses were arrived at despite contradictory evidence.

Drum, Priscilla A., & Calfee, Robert C. Compensatory reading programs, what are they like, and are they different? In Robert C. Calfee & Priscilla A. Drum (Eds.) *Teaching reading in compensatory classes.* Newark, Delaware: International Reading Association, 1979. 172-191.

Utilizes the findings from a questionnaire survey to describe compensatory reading programs. Compensatory program funds were used to support aides, extra materials, and, to some extent, reading specialists. Specialists and aides appeared to be used in either decreasing effective class size or in giving intensive, small group instruction. Except for these differences, compensatory programs tended to resemble instruction in regular classrooms. Experience of teachers appeared to be a decisive factor in planning compensatory reading instruction. Children in such programs generally came from poor families and from ethnic minority backgrounds. Once in a compensatory program, children tended to remain in it. Reading groups in such classrooms were often based on reading ability and tended to range from two to ten in size. Instruction occurred approximately half an hour a day, five days a week. More whole group and large group instruction occurred in the upper grades than in the lower grades. Some 27 percent of teachers relied solely on a basal approach.

Pikulski, John J., & Kirsch, Irwin S. Organization for instruction. In Robert C. Calfee & Priscilla A. Drum (Eds.) *Teaching reading in compensatory classes.* Newark, Delaware: International Reading Association, 1979. 72-86 & 187-191.

Summarizes questionnaire data on organizing for instruction in compensatory classrooms. Within a school, 82 percent of principals responding to the questionnaire reported the use of graded classes. The most frequently cited support personnel consisted of reading specialists, remedial reading teachers, and supervisors. Mean class size ranged from 26.8 at grade 2 to 30.7 at grade 6. A mean class size of 31.7 was found for ungraded classes. An adult working with a group of two to ten children was the predominant grouping pattern for reading instruction with reading grade level as the most common basis for creating a reading group. Compositions of groups rarely changed. Pupils received about 168 minutes of reading instruction per week, usually given in daily periods for sixteen to thirty minutes at a time.

Dixon, Carol N. Selection and use of instructional materials. In Robert C. Calfee & Priscilla A. Drum (Eds.) *Teaching reading in compensatory classes,* Newark, Delaware: International Reading Association, 1979 104-113 & 187-191.

Discusses findings from a questionnaire covering selection and use of instructional materials in a compensatory program. In general the selection of materials was a group decision, with or without the teacher's input. Upper grade teachers and those from urban areas appeared to have more say in material selection than did others. Over 75 percent of teachers registered general satisfaction with the instructional materials they had. Large proportions of all teachers used textbooks other than basals, books other than texts, newspapers and magazines, movies or filmstrips, tapes and records, games and puzzles, and teacher-prepared materials. Only 24 percent of the teachers used a single basal as their total reading program.

Calfee, Robert C. & Drum, Priscilla A. Teaching goals and teaching time in compensatory reading programs. In Robert C. Calfee & Priscilla A. Drum (Eds.) *Teaching reading in compensatory classes.* Newark, Delaware: International Reading Association, 1979. 146-171 & 187-191.

Examines compensatory teachers' goals and explores the effect of goals and various background variables on teachers' judgments of how they spent time in reading instruction. Data were based on a questionnaire sent to teachers and principals in schools where there was a compensatory program. Factors affecting teachers' goals in a compensatory program included years of teaching experience, community, family income, and grade level. However, the factors mentioned did not predict variations in goals with much precision. The most important predictors of average time spent in reading were grade level, amount of teaching experience, and family income.

Howlett, Nancy, & Weintraub, Sam. Instructional procedures. In Robert C. Calfee & Priscilla A. Drum (Eds.) *Teaching reading in compensatory classes.* Newark, Delaware: International Reading Association, 1979. 87-103 & 187-191.

Presents and interprets data on instructional procedures from a questionnaire sent to teachers of compensatory reading classes. Data from more than 600 respondents were used at grades 2 and 4, while information from about 450 questionnaires served as the data base at grade 6. A basal approach proved to be the most widely used with 87 percent at grade 2, 83 percent at grade 4, and 83 percent at grade 6 reporting that they used it either extensively or some. Major instructional goals included developing comprehension, improving attitudes, developing listening skills, improving self-image, learning word meanings, and using context clues. More Grade 2 compensatory teachers reported spending a great deal of time on phonics/structural analysis activities than on anything else, while at grades 4 and 6 more teachers reported spending a great deal of time on learning word meanings than on any other activity. Considerable amounts of time are spent at all grade levels in oral reading with silent reading more common in the upper grades than in grade 2. Despite the approach preferred by the teacher, there is a sameness in the goals held.

II-6 Reading habits

HUGHES, ANDREW S.; & JOHNSTON-DOYLE, KIMBER. What do teachers read? Professional reading and professional development. *Education Canada,* Fall 1978, *18,* 42-45.

Reports the professional reading habits of 373 public school teachers in the Maritime provinces of Canada. Data were gathered using a survey questionnaire which addressed: 1) the extent to which teachers used journals for professional development; and 2) the emphasis teachers would like to find in their professional journals. The majority of respondents (88 percent) were classroom teachers and 43 percent had more than ten years experience. A total of 281 different periodicals were cited. Of these, 170 were reported read by at least one teacher. Half of the journals mentioned were aimed at teachers; the other half were of general interest. *Instructor* was the most widely reported professional magazine and *Time* was the leader in the general interest category. While 19 percent of the teachers reported that they regularly read five or more professional or general interest publications, 13 percent indicated that they read no periodicals. The survey data revealed that teachers as a professional group are not "subscribers" to professional publications. Among the teachers' choices for emphasis in professional journals were pragmatic ideas for materials/methods and treatment of issues of broader concern, including recent developments and promising practices. The researchers offer suggestions for encouraging professional reading.

SCHUBERT, DELWYN G. What teachers remember about their early reading. *The New England Reading Association Journal,* 1979, *14* (2), 37-40.

Describes the memories of earliest reading experiences of 244 (M=84; F=160) teachers enrolled in professional courses in reading at California State University, Los Angeles, and the University of Victoria during the years 1975 and 1977. Of the earliest memories, 36 percent were classified as "pleasant," while 33 percent were judged "unpleasant." The other 51 percent were either neutral or had no particular recall of their early reading. Women teachers (39 percent of the total) more often than men teachers (31 percent) had early memories of reading experiences that were pleasant. Men teachers (49 percent) more often than women teachers (24 percent) recalled unpleasant experiences.

JUDY, STEPHEN, & JUDY, SUSAN. English teacher's literary favorites: the results of a survey. *The English Journal,* February 1979, *68,* 6-9.

Presents results of an open-ended questionnaire which invited English teachers to submit both their personal and teaching literary favorites in the areas of the English noval, the American novel, recent best sellers, young adult novels, children's books, poems, older short story, modern short story, classic drama, modern drama, filmed book, televised book, young adult novelist, adult novelist, poet, playwright, and dead and living authors. In order to receive a "numbered" ranking in the list of literary favorites, a book or author had to be mentioned by at least 5 percent of the respondents. (Total N not reported.) The surveyors observed that English teachers tend to teach their personal favorites, and prefer American novels, that books by women and by minority authors are not commonly listed, that few books published in the 1970s are favorites, and that best sellers are infrequently taught.

WILSON, PETER. No wonder I didn't learn to read till I was about ten. *Reading—UKRA,* December 1978, *12,* 2-9.

Reports results of an effort to simulate the beginning reading task for adults by encoding early readers into an alternative orthography (A.O.) Teachers in a reading development course at the Chelmer Institute of Higher Education were introduced to introductory reading books, intact except for the substitution of the Greek alphabet for traditional orthography (T.O.) An effort was made to assign a range of phoneme/grapheme relationships to each phoneme of English comparable to the English spelling system. Tape recordings were made of small groups of teachers as they read the A.O. books and described their strategies. From analysis of the transcripts, the researcher concluded that teachers were most successful in reading when they used picture clues intelligently and guessed words and phrases from context. They appeared to have more difficulty when they focused solely on unfamiliar, graphic cues.

II-7 Characteristics and roles

HARSTE, JEROME C., & STRICKLER, DARRYL J. Teacher characteristics. In Robert C. Calfee & Priscilla A. Drum (Eds.) *Teaching reading in compensatory classes.* Newark, Delaware: International Reading Association, 1979. 54-71 & 187-191.

Describes the professional characteristics of a sample of 1,750 second-, fourth-, and sixth-grade teachers from an Educational Testing Service Phase I study of compensatory reading programs. Variables considered in the description were professional preparation, teaching experience, job satisfaction, attitude toward students and school administrators, and the teacher's perception of the success of compensatory reading programs. The profile of the "typical" compensatory reading teacher (1972) is that of a white female with from five to ten years teaching experience, certified and specifically trained in reading problems. The teacher tended to be satisfied with colleagues, less satisfied with students, convinced of the effectiveness of compensatory programs for learners, but uncertain as to the cost effectiveness of the programs. The profile teacher felt that the worth of a program depended foremost on the teacher, then the method, and least on the materials. A further characteristic was that the typical teacher believed that the reading problems of disadvantaged children reflected deficiencies in the children's thought and language. The authors state that this belief may interfere with appreciation of language and reduction of expectation.

RUPLEY, WILLIAM H., & BLAIR, TIMOTHY R. Characteristics of effective reading instruction. *Educational Leadership,* December 1978, *36,* 171-173.

Suggests that research is beginning to tell what works in the teaching of reading.

INTERNATIONAL READING ASSOCIATION. EVALUATION COMMITTEE. What's in a name: reading specialist? *Journal of Reading,* April 1979, *22,* 623-628.

Reports results of a survey of the IRA membership conducted in the early 1970's in which a plurality of members (39 percent) identified themselves as "reading specialists." Respondents who so identified themselves were included in a follow-up survey by IRA's Evaluation Committee. Two survey forms were developed: one for states issuing reading specialist certificates and one for those that do not. Of the original group identifying themselves as reading specialists, 5.5 percent (N=477) responded to the survey. Of the 244 respondents who were from states which specifically issued reading specialist certificates, 23 percent did not hold the certificate. Of the 220 respondents from states with no specialist certificate, 42 percent (N=93) did hold such a certificate, although they might have held some other reading certificate. Respondents' titles were based on factors other than specialist certificates, such as time spent or ability in teaching reading, taking courses or earning degrees with a reading emphasis, or those who were self-taught. Reading specialists identified activities in which they spent 20 percent or more of their time. The four most frequently mentioned were teaching remedial reading, providing diagnostic work, developing instructional materials, and teaching developmental reading.

COHEN, ELIZABETH G; INTILI, JO-ANN K.; & ROBBINS, SUSAN HUREVITZ. Teachers and reading specialists: cooperation or isolation? *The Reading Teacher,* December 1978, *32,* 281-287.

Surveys teachers in forty-six elementary schools in the San Francisco Bay Area to describe whether and to what degree they worked with reading specialists or resource teachers. In addition, the researchers were interested in determining how reading specialists are used, how they cooperate with teachers, and the results of close cooperation between teacher and specialist. Nearly three-fourths of 414 teachers reporting on the particular questions had access to a specialist for teaching reading to selected students. Thirteen percent reported that the specialist offered suggestions more than once or twice a month. Of 209 respondents, 56 percent said they received diagnostic feedback once a month at most. Half the teachers reported that specialists never or rarely provided special reading materials. The typical working pattern was that of a specialist instructing selected students and providing no other service. There appeared to be a marked association between the degree of cooperation and the instructional practices of use of detailed, formal planning and record keeping for individual students, and use of complex information in making instructional decisions.

PRENDERGAST, JOHN F. Establishing the reading consultant as an agent of change. *Reading World,* December 1978, *18,* 123-131.

Provides a brief review of the history of reading consultant/specialist/supervisor positions. Some models of consultant/change agents are also discussed.

BEAN, RITA M. Role of the reading specialist: a multifaceted dilemma. *The Reading Teacher,* January 1979, *32,* 409-413.

Examines the specific roles of reading specialists as teachers rated those roles according to impact on the children served. The study was part of an effort funded by Right to Read program which investigated the effectiveness of intensive reading instruction by reading specialists. One of the primary goals of this Special Emphasis Project of the Pittsburgh City School District was to study the roles of the specialist and to observe effects on students and teachers. Four reading specialists, assuming four major roles (diagnosis, instruction, inservice training, and resource to parents) were hired. At the end of one year, fourteen teachers evaluated the roles of specialists on a prescribed form by distributing fourteen points among the role descriptions. The most highly valued roles of the specialist, as viewed by teachers, were those as resource person to the teacher (i.e. providing inservice, materials development aid, and conferences). Least valued was the specialist's aid in individual and small group diagnosis.

III. Sociology of reading

III-1 Use of mass media

DENNIS, EVERETTE E. *The media society: evidence about mass communication in America.* Dubuque, Iowa: Wm. C. Brown, 1978.

Reviews analytically research on mass media in America. Considered were researchers' objectives, definitions of terms, and collection, interpretation, and reporting of data about the relative impact, influence, and effect of mass communication in society; the inner workings and dynamics of media; and media criticism and analysis.

WEAVER, DAVID H., & BUDDENBAUM, JUDITH M. Newspapers and television: a review of research on uses and effects. *ANPA News Research Report,* April 20, 1979, No. 19, 2-11.

Synthesizes findings of more than 100 studies published since 1955 which look at the uses and effects of newspapers and television.

GORDON, THOMAS F.; & VERNA, MARY ELLEN. *Mass communication effects and processes: a comprehensive bibliography, 1950-1975.* Beverly Hills, California: Sage Publications, 1978.

Presents an extensive bibliography on the social-psychological effects of the mass media. Sources used to compile the bibliography include bibliographies of books, articles, and research reports; the Cumulative Book Index (1950-1975) under several headings; eighteen related bibliographies; various abstracting services; and fourteen journals. Citations were then categorized into five major groupings with additional subcategories under each.

STANLEY, ROBERT H., & STEINBERG, CHARLES S. *The media environment.* New York: Hastings House, 1976.

Examines the content, structure, and control of the communications media in the United States. Included in the treatment is the historical development of print and the current impact of newspapers and magazines, the media and minorities, and public relations and advertising in the media.

RUBIN, BERNARD. *Media, politics, and democracy.* New York: Oxford University Press, 1977.

Examines the role of the mass media as agents of change in today's society and deals with the ways in which the media handle events and processes. Five key topics are analyzed: communications objectivity, community value setting, media freedom, popular participation, and election trends. The author reviews relevant research under each of the five topics and develops extensively his argument that the mass media have unparalleled civic responsibilities.

HALLORAN, JAMES, D. Studying violence and the media: a sociological approach. In Charles Winick (Ed.) *Deviance and mass media* (Vol. 2). Beverly Hills, California: Sage Publications, 1978. 287-305.

Reviews research on the relationship of media content and violence. Included are definitions of violence, differences in the presentation of violence in the media in various countries, the influence of socioeconomic or political changes on violence, television and delinquency, differences among the media in the presentation of crime news, and public interpretation of the portrayal of violence.

TUNSTALL, JEREMY. *The media are American.* New York: Columbia University Press, 1977.

Delineates the influence of American and British media upon worldwide media (newspapers, radio, television, films, periodicals, news agencies) during this century. Well-documented data regarding the history, extent of use, and types of information and entertainment emitted from the media are given for different countries along with such information as imported and nationally produced television programming and films, numbers of television and radio sets, newspapers and magazines, advertising expenditures, and media research. The relationships of technology, politics, and commerce to the media and media production and consumption in Soviet countries are discussed. The thesis of the book, published in Great Britain, is that America and, to a lesser extent, England have had world leadership roles in the media.

O'KEEFE, GARRETT J., & MENDELSOHN, HAROLD. Nonvoting: the media's role. In Charles Winick (Ed.) *Deviance and mass media* (Vol. 2). Beverly Hills, California: Sage Publications, 1978. 263-286.

Investigates motivations for nonvoting behavior and relates them to media orientations. The data, generated for a national survey including other topics, were based upon responses of 1,486 subjects to eleven rationales for not voting and to questions about their reaction to the media. Political interest and level of education were control variables. Within each age group the more educated and politically interested indicated greater newspaper and television news exposure but rated them less fair in treatment than did the overall sample. Television is the prime information medium for nonvoters. Media orientations were more predictive of abstention reasons among 18-24 year olds and those age 65 and over than for middle age groups. Interest in politics emerged as the most consistent predictor of substantive reasons for abstention.

STROMAN, CAROLYN A., & BECKER, LEE B. Racial differences in gratifications. *Journalism Quarterly*, Winter 1978, *55*, 767-771.

Interviews 142 blacks, 1,401 whites, and thirty-two others concerning their general newspaper reading and television viewing habits, media use patterns during a congressional campaign, and gratifications sought from political media use. The findings showed that Blacks in comparison with whites are less committed to newspaper reading and more dependent upon television, are less likely to follow newspaper campaign news and to read much of the news content of the newspaper, with the exception of crime and accident news. Whites use political content from the media to learn about candidates and to gain assistance in voting more than blacks.

ATKINS, PAUL A., & ELWOOD, HARRY. TV news is first choice in survey of high schools. *Journalism Quarterly*, Autumn 1978, *55*, 596-599.

Surveys 217 high school students ranging in age from 15 to 20 to determine which medium was preferred and considered most believable for news. Television (52 percent) was favored over radio (24.4 percent), newspapers (20.7 percent), and news magazines (8.1 percent). Television (57.2 percent) was also considered the most believable compared with newspapers (19.2 percent), radio (13.5 percent), and news magazines (13.5 percent). The majority of students spent up to thirty minutes daily acquiring news, mostly from radio or television. Four out of five students reported reading a newspaper daily.

Robinson, John P. Daily news habits of the American public. *ANPA News Research Report No. 15.* Washington, D.C.: American Newspaper Publishers Association, September 22, 1978.

Analyzes data from one-day diaries and interviews and re-interviews in 1975-76 with just under 1,000 American adults concerning their previous day's activities and newspaper and television exposure. On a typical day more people read a newspaper than watched television news. Newspapers' edge over TV news is maintained across all demographic groups. Older adults are more likely to use both media while younger ones are adverse to any news medium. Daily use of news magazines and radio news programs is at lower levels than either that of television or newspapers. Over the last ten years, there has been no decline in newspaper use among those aged 18-24, but there has been a decline, ranging from 2 percent to 13 percent, among older people.

Shelton, Keith. Timeliness in the news: television vs. newspapers. *Journalism Quarterly,* Summer 1978, *55,* 348-350.

Compares the timeliness of local news presented in two newspapers and on three television stations in Dallas. Logs of television local news programs for a 15-day period were compared with newspaper stories of local news for the same period. It was concluded that only a few stories were more timely on television than in newspapers; any advantage that television held was over morning newspapers. Television relied more on news stories which could be pictured than on more substantial news.

Hicks, Ronald G., & Broussard, E. Joseph. Capital coverage rated. *Grassroots Editor,* Summer 1978, 5-6, 14.

Asks members of the Louisiana Legislature to rank daily and weekly newspapers, radio, and television in terms of ten coverage factors and for overall goodness of coverage. The factors were rated on a 10-point scale, and ratings were averaged for each factor. The legislators generally gave fairly high ratings to all news media. Daily newspapers rated higher than all other media on goodness of coverage and on eight of the ten factors and tied with television for the ninth factor, accuracy. Television was a consistent second; radio, third; and weekly newspapers, last.

Eswara, H. S., & Krishnamurthy, Nadig. How school achievement relates to mass media use. *Journalism Quarterly,* Winter 1978, *55,* 785-788.

Explores the relationship of mass media use and school achievement of 268 high school students in Mysore City, India. Subjects completed questionnaires bearing on their mass media habits. School achievement was determined by marks obtained in six subjects. Comparisons between low and high achievers in schools classified as poor and good resulted in varied relationships. No difference between high and low achievers in the total groups was found in time devoted to reading newspapers, but students in poor schools spent significantly more time doing so than students from good schools did.

High achievers in good schools spent more time reading newspapers than low achievers in the same schools; the reverse was true for students in poor schools. High achievers, as a whole, spent more time listening to the radio but attended movies less frequently than low achievers.

FOX, SHARON E. TV: the reading teacher's friend or foe? *Ohio Reading Teacher*, July 1978, *12*, 5-8.

Interviews kindergarten, first and second grade children participating in a Title I Reading Program to determine favorite television programs and compares findings with those from a sixth grade class. The choices of the two age groups were distinctly different. The younger students preferred programs written for their age; the sixth graders watched adult programs. When asked what activities they would rather do or watch television, the third choice for young children was to be read to. Reading a book was the second choice for the sixth graders.

SEMLAK, WILLIAM D. Effect of media use on foreign student perceptions of U.S. political leaders. *Journalism Quarterly*, Spring 1979, *56*, 153-156, 178.

Studies the effects of specific media (network television news, radio news, daily newspapers and shortwave radio broadcasts from mother countries) on the perceptions of political leaders of 104 foreign students studying in the United States. Media use and attitudes towards U.S. political situations were measured by an instrument constructed for the study. Factor analysis performed on the items concerned with the perceptions of political figures and American institutions resulted in the identification of four factors. The variables within each factor were canonically correlated with media use variables, three being found to be statistically significant. The results indicated that foreign newspapers and shortwave radio use accounted for most of the relation between media use and political perception.

KLINE, F. GERALD. How to edit a paper for nightime viewers. *Editor and Publisher*, February 11, 1978, 17-18.

Reports the results of a survey of 1,575 subjects concerning their reading and viewing behaviors. In general, people who read newspapers daily devote less than an average amount of time televiewing and vice versa. Education is not related to evening televiewing but is to print public affairs knowledge. People with college educations appear to be committed to public affairs news. Newspapers do not appeal to youth as much as older people. The more hours people worked, the more they tended to read public affairs and people newspaper stories.

SOSANIE, ARLENE K., & SZYBILLO, GEORGE J. Working wives: their general television viewing and magazine readership behavior. *Journal of Advertising*, 1978, *7* (2), 5-13.

Examines televiewing behavior and magazine readership of non-working, part-time employed, and full-time employed married women. Data were originally collected for another study from personal interviews and diaries of 15,028 adults and included time spent in televiewing; whether or not subjects had read two issues of designated magazines; ages of subjects and children living at home, if any (family life cycle); family income. Total television exposure decreased as the working hours increased while magazine readership was highest among working wives. With the exception of one magazine, the relationship of employment status to media behavior is contingent on levels of income and stages in the family life cycle.

REYNOLDS, FRED D.; MARTIN, WARREN S.; & MARTIN, WENDY K. Media habits of in-home buyers. *Journal of Advertising*, Spring 1977, *6*, 32-35, 31.

Examines the media habits of 275 homemakers who were divided into three groups based upon their purchasing patterns (non-home shoppers, speciality in-home shoppers, general in-home shoppers). The 275 respondents indicated on a questionnaire the number of times they ordered by mail, phone, or desk and their frequency of reading, listening, or viewing each of ninety-two media categories. The specialty shoppers reported the highest level of readership for *Newsweek* and *Cosmopolitan;* the general shoppers, *Vogue, Glamour, Time,* and *Family Circle.* Groups I and III preferred documentaries; Groups II and III had greater interest than Group I in mystery (suspense programs). A substantial portion of the sample (60 percent) belonged to Group I, the non-home buyers.

JONES, LARRY D. Farmers rate weeklies best for news. *Publishers Auxiliary,* October 9, 1978, 6.

Surveys farmers in one Illinois county to determine sources of information they need. The farmers ranked the agricultural information sources in the order in which they used them. Although nearly three-fourths of them subscribed to a daily newspaper and 90 percent listened to farm news on radios, farm magazines were rated the best for farm news coverage.

JEFFRES, LEO W., & HUR, K. KYOON. White ethnics and their media images. *Journal of Communication,* Winter 1979, *29,* 116-122.

Questions 768 subjects from thirteen ethnic groups concerning ethnicity, use of ethnic and metropolitan mass media, ethnic interpersonal communication, and ratings of newspapers and television concerning coverage of ethnic community and mother country news. Questionnaires were tailored to each ethnic group. Perceptions of the quality of media portrayal depended upon the ethnic group to which people belonged. Most felt that television and metropolitan newspapers did not cover well their communities but were less critical of ethnic media. Women and older people tended to rate mass media and perceived ethnic images more positively than men and younger subjects. The more highly educated and affluent the subject was the more critical he was of major media.

SOCIETY FOR THE ADVANCEMENT OF EDUCATION. Newspapers top TV in political candidate coverage. *USA Today*, December 1978, *107*, 13-14.

Reports the results of a study concerned with people's opinions about Senatorial candidates and their use of mass media. A nationwide, random sample of more than 1,800 adults was interviewed following the 1974 election. In the sixty-seven different news markets surveyed in twenty-five states, the number of reasons people gave for their preferred candidate correlated highly with use of newspapers but negatively with television use. The effectiveness of newspapers remained when years of education and general interest in politics were controlled. Almost half of the people interviewed could not give a reason for preferring one candidate over the others. Better informed people were found in areas of competing newspapers rather than in monopoly market areas.

SHAW, EUGENE F. The interpersonal agenda. In Donald L. Shaw & Maxwell E. McCombs. *The emergence of American political issues: the agenda-setting function of the press.* New York: West Publishing Company, 1977. 69-87 & 171-208.

Investigates the relationship of political use of newspapers and television with frequency of political discussion. The mounting interest of voters in a Southern city in an election campaign from June to October was accompanied by greater use of the media for political information. Voters who discussed politics daily showed the sharpest increase in political viewing and the smallest decrease in political reading for the two time periods. Newspapers had more impact on agenda-setting of subjects than television. Voters who engaged in daily political discussions showed concerns, with the exception of one issue, which correlated with those emphasized in the local newspaper. The newspaper influence can be indirect if nonreaders belong to discussion groups in which issues are discussed by newspapers' readers.

WHALE, JOHN. *The politics of the media.* Atlantic Highlands, New Jersey: Humanities Press, 1977.

Views the relationship between the government and the media in Britain since World War II. The history of broadcasting and newspapers since 1945 is presented along with three postwar inquiries into the media. The number of newspapers has fallen since 1945 but at a rate no faster than it did between the two World Wars. Advertising has grown as a source of newspaper revenue. The government's power over newspapers has continued to be small, but its power over broadcasting is large. The law has been a greater inhibitor of press freedom than has the government. However, the strongest influence on the press has been the reader.

BROWNE, KAREN. Comparison of factual recall from film and print stimuli. *Journalism Quarterly,* Summer 1978, *55,* 350-353.

Compares the recall of subjects who read a written version and those who watched a documentary film concerned with the legislative process in Oklahoma. The subjects who were sixty-three volunteers from two jury pools at a county courthouse answered the same pre- and posttest of legislative questions. No significant differences were found on the pretest between the group that watched the film and those who read the article on the same topic. On the posttest the reading group had significantly better recall than the film group.

Kuo, Eddie C. Y. Multilingualism and mass media communications in Singapore. *Asian Survey,* October 1978, *18,* 1067-1083.

Investigates the Singapore mass media system (newspapers, radio and wire broadcasting, television, and cinema) with a focus on the relationship of language factors and the population served. In all types of media, all official languages are used to make their contents available to the linguistically diversified population. Contents in the English language only are shared by those of different ethnic backgrounds while content in the ethnic languages (Chinese, Malay, Tamil) draw almost exclusively from the ethnic populations they serve. The total daily newspaper circulation of the eleven newspapers was estimated as 477,000; younger people generally read more newspapers than older ones.

Lent, John A. Malaysia's national language mass media: history and present status. *South East Asian Studies,* March 1978, *15,* 598-612.

Traces the development of mass media in Malaysia and describes contemporary Malay media. The national language press, in comparison with that in other countries, is relatively young, beginning with the first recognized newspaper in 1876. Since that time at least 200 different newspapers have been published; the most prolific time was between 1906-1941 when 147 periodicals were issued. During World War II a number of underground newspapers, largely written in Chinese, were started and continued until 1960. Currently, readership of Malay newspapers is high. They are closely tied to the government and are virtually owned by government agencies. Strong sedition and printing press acts have stifled all media. Broadcasting began in 1934 in four main languages and now has five radio networks; television with two networks started in 1963. The national language is now encouraged in all programming.

Lent, John A. Mass media in Malaysia. *Asian Profile*, April 1978, *6*, 153-161.

Reviews research of Malaysian mass media especially in regard to governmental supervision and control of the output. Malaysia possesses a diversified mass media: fifty daily and Sunday newspapers published in five different languages, six radio networks, two television channels and an educational one, all under government ownership and control. Numerous laws have been enacted concerning the operation and contents of the media; for example, an amendment forbids discussion of four sensitive issues. Content analyses of the print medium reveal large proportions of information supplied by the government. The authorities maintain that Malaysia has press freedom but that certain issues must not be discussed to avoid lawlessness and anarchy. The result is that the intelligentsia have gone underground in Malaysia.

McNelly, John T. International news for Latin America. *Journal of Communication*, Spring 1979, *29*, 156-163.

Investigates in a series of studies the media's role in disseminating international news in Latin America. Availability of the media varies extensively among the countries. Newspaper circulation has remained low but relatively stable in comparison with the broadcast media which have spread too fast for official statistics to keep pace, especially radio. Newspapers in developing nations compare well with their counterparts elsewhere in international news coverage; for the broadcast media, news of any kind ranks low as a content area. A growing mass audience for the media, the amount of time spent with mass media, media impact on informational levels, and the influence of previous background knowledge were considered in the report.

LENT, JOHN A. Key sources on Southeast Asian mass communication. *International Library Review*, April 1979, *11*, 285-299.

Lists sources on the study of Southeast Asian mass media. Includes bibliographies, directories, and periodicals.

III-2 Content analysis of printed sources

TAYLOR, MARY AGNES. From apple to abstraction in alphabet books. *Children's Literature in Education*, Winter 1978, *9*, 173-181.

Analyzes the textual patterns around which alphabet books are structured. Most of the alphabet books fall into one or a combination of four basic patterns: a word-picture format, a simple narrative, a collection of nonsense verse, a subject-oriented content. Within each format are varying degrees of language and content sophistication. Brief case studies are given for fourteen alphabet books, beginning with an 1886 one by Kate Greenaway and including recently published ones.

MACCANN, DONNARAE. Something old, something new: children's picture books in Poland. *Wilson Library Bulletin*, June 1978, *52*, 776-782.

Describes the illustrations and content in Polish children's picture books. Since 1954 the illustrations show a high degree of individuality. Expressionism and surrealism received an impetus in the 1950's after the years of 1949 through 1954 when artists were forced to work in isolation and to keep their art underground. Many trends, such as colorism, were borrowed from Polish painting. Nature is extensively depicted in both illustrations and poetry. Propaganda was a function of children's picture books during the early 1950's but seems to have been abandoned since then.

LEGENZA, ALICE, & KNAFLE, JUNE D. How effective are pictures in basal readers? *The Reading Teacher*, November 1978, *32*, 170-173.

Applies a language potency formula to pictures in eight series of basal readers for grades one and two. An average of eleven pictures for each first grade series and six for each second grade series was analyzed for ten factors (different things, significant things, total things, colors, actions, children, people, things with potential for movement, size of plate, empathy for children) and given a high, medium, or low potency rating. Most of the pictures analyzed received a low potency rating. The factors differentiating between low and high ratings were actions, children, and people.

Lorimer, Rowland; Hill, Margaret; Long, Margaret; & MacLellan, Barbara. Consider content: an analysis of two "Canadian" primary language arts reading series. *Interchange*, 1977-1978, *8*(4), 64-77.

Analyzes 2 primary language arts reading series used in Canada in relation to characters in the stories, their portrayal, and the context in which they act. Of the 425 characters in approximately 150 stories, 57 percent were people and the remainder, animals. There was a preponderance of males, both people and animals. Only 33 percent of the stories contained children. Males had a broader range of character traits than females. A lack of stories with a community-oriented theme and opportunities for children to initiate action were noted; many of the stories had no location given.

Steuer, Loreli Olson, & Steddom, Susan Simonton. From McGuffey to the eighties: American basic reading programs. *Teacher*, May/June 1979, *96*, 58 & 63-66.

Traces the major values found in basal readers from the McGuffey era (1840-1920) to the present time. The first editions of the McGuffey readers presented a code for conduct and the religious reasons for the code, the latter being dropped in later editions. Between 1930 and 1960 the books produced by different publishers reflected the idealistic and materialistic values shaping American society with moral values being less explicit. A number of the changes in current books are reminiscent of qualities found in the McGuffey readers. In the 150 years of American readers, many of the values, such as kindness, helpfulness, and a love for the natural world have remained the same, but the characters and plots have changed.

Graney, Marshall. Role models in children's readers. *School Review*, February 1977, *85*, 247-263.

Analyzes differences in nineteenth- and twentieth-century Americans as depicted in seventy five stories from McGuffey's second and third readers and 119 stories from modern third grade books. Methods for classifying contents were devised on an *a priori* basis and revised after trial applications. Authority models have changed substantially over time with the percentage of individualistic authority figures declining approximately one-third. McGuffey presented inner-directed and other-directed characters with approximately equal frequency; in modern readers the ratio of other-directed to inner-directed self models was almost five to one. The nature of the activities of the characters (production and consumption) did not show an impressive change over time.

Moncman, Mary (& Jerry Mallett, contributing editor). Children's books about birth. *Ohio Reading Teacher*, October 1978, *13*, 5-8.

Compares the treatment of birth in children's books published in the 1950s with that in books of the 1970s through content analysis. Much change was noted in the books published in the two periods. More pictures and fewer euphemisms were found in the more recent books. Details of the analysis are presented for three books of the fifties and five books of the seventies.

WALKER, MAXINE. Last rites for young readers. *Children's Literature in Education*, Winter 1978, *9*, 188-197.

Analyzes the portrayal of death of children in children's literature at different periods. The Christian morality concept of death of the nineteenth century disappeared and was replaced by a return to the reality and acceptance found in folklore except that there is a concern for the individual in current stories. Death is portrayed in twentieth century books as a natural event which is not frightening unless people choose to make it so. Examples and excerpts are given from books written in English-speaking countries.

CAMPBELL, PATRICIA. Women in sports in children's books: wealthy, white and winning. *Interracial Books for Children Bulletin*, 1979, *10*(4), 3-10.

Examines children's books, concentrating on biographies, for the portrayal of female athletes. It was found that these books vary in quality and stereotyping, that a number are both sexist and anti-sexist, that they are primarily concerned with white women, that the sports referred to are individual ones, and that the characteristic of feminity is stressed for these athletes. Women from minority groups and participation in team sports are often not included in children's books.

MCCUTCHEON, GAIL; KYLE, DIANE; & SKOVIRA, ROBERT. Characters in basal readers: does "equal" now mean "same"? *The Reading Teacher*, January 1979, *32*, 438-441.

Analyzes in a case study approach different treatments of the same story by Asimov which appeared in four different basal readers. Features which were changed in the textbooks were surnames and sexual and ethnic identities. Since no other substantial changes were made, the investigators raised questions concerning the adequacy of the depiction of ethnic minority characters.

COHEN, ADIR. Children's literature in the work of Leo Tolstoy. *Journal of Reading*, January 1979, *22*, 296-311.

Reviews in depth many of Tolstoy's beliefs with emphasis upon books for children. His major contributions to children's literature are his legends, fairy tales, fables, and adaptations of folk tales, all simply written during his entire creative period. His didactic, moralistic approach, used for instructional purposes, was attacked by many. Many of his stories dealt with strong relationships among friends, the stories resulting in children's developing a sense of responsibility for others. Tolstoy felt that truth, beauty, and goodness were not dependent upon education, that teachers should stop teaching and permit students to learn through discovery, and that background knowledge and concepts were important before learning could take place. Tolstoy laid the foundation of realistic stories of childhood in Russia.

APPLEBEE, ARTHUR N. Toward pluralism: resources for avoiding stereotypes and bias in children's literature. *Language Arts*, April 1979, *56*, 451-456.

Summarizes some materials that illustrate the biases that have been discovered in children's literature. The materials that are reviewed also provide guidance for teachers.

FRIEDMAN, LESLIE J. *Sex role stereotyping in the mass media: an annotated bibliography*. New York: Garland Publishing, 1977.

Annotates over 1,000 selections including studies, editorials, content analyses and popular articles pertaining to sex stereotyping in the media.

LYSTAD, MARY. The adolescent image in American books for children: then and now. *Children Today*, July/August 1977, *6*, 16-19, 35.

Traces the changes in the portrayal of adolescents in American books for children and youth over a 200-year period. Differing role definitions and opportunities for adolescents are noted. Until 1850 books were written primarily to instruct young people in religious and social matters with settings being in the home and needs being salvation in heaven and strength and achievement on earth. After 1850 family and church were important institutions especially for girls; the work place was important for boys. Stereotyping of girls and minority races was found especially in the earlier periods. During the twentieth century books were written for entertainment rather than instruction; the adolescent's feelings and attitudes were explored; choices of lifestyle, career, and family structure are explored. Examples of situations are included in the report.

ANSELLO, EDWARD F. Age and ageism in children's first literature. *Educational Gerontology: An International Quarterly*, July/September 1977, *2*, 255-274.

Surveys juvenile picture books and easy readers to determine the extent of age stereotyping in roles, behaviors, and descriptions of older characters. Of the 656 books published within the past ten years 108, or 16.46 percent, contained any older characters. More men than women, with a significant underrepresentation of minority older characters, was found. Ansello concluded that the cumulative impression of older characters is a relatively unimportant, unexciting, and unimaginative one, with the characters being fairly inarticulate, supportive, and undeveloped.

ROBIN, ELLEN PAGE. Old age in elementary school readers. *Educational Gerontology: An International Quarterly*, July/September 1977, *2*, 275-292.

Presents findings and comparisons of two content analyses of elementary reading textbooks with regard to content and illustrations concerning old age. Forty-seven books, primer through grade 6, published between 1953 and 1968, were compared with thirty-three books, published in 1975 by the same publisher. Series in both time periods included the same proportion of old characters in relation to total characters (5.6 percent), a proportion considerably lower than that of old people in the United States. When old people appear, they are usually in major roles and are presented positively. An overwhelming preponderance of male characters was noted.

Society for the Advancement of Education. Stereotypes of aging in children's books, *USA Today*, December 1978, *107*, 13.

Reports findings of a study concerned with the images of old people as portrayed in 100 children's books published in the years 1950-1959 and 1965-1976. Five books from each year during the two periods were selected randomly from the *Children's Catalog*. The aged represented 3.3 percent of the characters in the text as compared with an average of 9.3 percent of the population for the two periods. They worked in jobs not requiring mental activity, appeared more sickly and passive than other adults, were unfailingly pleasant, and did not display a range of realistic emotions. Books in which the foregoing characteristics were portrayed are listed in the report.

Storey, Denise C. Gray power: an endangered species? Ageism as portrayed in children's books. *Social Education*, October 1977, *41*, 528-533.

Analyzes more than 100 books for children published between 1972 and 1977 for the treatment of the aged according to nine criteria. The elderly were portrayed as they were viewed before organized groups mounted a concerted effort to help others see them as they really are. Grandparents were too old for the age of their grandchildren. Their occupations were seldom given. Suggestions for using the books for critical reading and an annotated bibliography with ratings of children's books portraying the elderly are included in the report.

Storck, Patricia A., & Cutler, Marion B. Pictorial representation of adults as observed in children's literature. *Educational Gerontology: An International Quarterly*, July/September 1977, *2*, 293-300.

Subjects thirty seven Caldecott Medal award-winning and 129 honorable mention children's books to a content analysis for the purpose of evaluating the portrayal of adults in fiction and nonfiction. No adults were found in forty-three books which were excluded from the analysis. In those analyzed there were significantly more adults who were male than female and healthy than physically handicapped; adults were illustrated more often in a positive manner rather than negative or neutral and appeared more frequently in fiction than in nonfiction. The researchers concluded that there was dissimilarity between the data and reality.

Peterson, David A., & Eden, Donna Z. Teenagers and aging: adolescent literature as an attitude source. *Educational Gerontology: An International Quarterly*, July/September 1977, *2*, 311-325.

Evaluates the presentation of older people in fifty three winners of the Newbery Medal for Adolescent Literature. Data were analyzed to ascertain the extent of development of older characters, positive or negative descriptions of them, social relationships shown, trends over time in their portrayal, numbers and complexities of older characters. Except for two books, all included at least one older character. In general, the older characters were similar to the U.S.

population except for the overrepresentation of males. Descriptions of behavior and appearances were judged to be more positive than negative, but older characters were underdeveloped and consistently given peripheral roles within the plot.

CHARLES, DON C. Literary old age: a browse through history. *Educational Gerontology: An International Quarterly*, July/September 1977, *2*, 237-253.

Reviews traditional literature, including the Bible, nineteenth and twentieth century plays, novels, poems, and light twentieth century fiction, to determine how old people were depicted. After the Old Testament, old characters are few and women almost non-existent. In general, elders are treated in literature with neglect, scorn, and ridicule; nineteenth and twentieth century literature appears to treat them more kindly than earlier literature did. Specific examples of the treatment of the elderly are given in literature at different times and in different countries.

SCHUERMAN, LAURELL E.; EDEN, DONNA Z.; & PETERSON, DAVID A. Older people in women's periodical fiction. *Educational Gerontology: An International Quarterly*. July/September 1977, *2*, 327-351.

Examines the numbers and roles of older characters in 216 stories published in all 1975 issues of nine women's magazines. Older characters were adequately represented in fiction and played more than their proportional share of major roles; they were described in a positive but inaccurate manner. They were not found to be representative of the actual population of older people in the United States on the variables of age, sex, health, marital status, financial status, housing, present or previous occupation, and retirement status.

BANFIELD, BERYLE. Racism: an African American perspective. *Interracial Books for Children Bulletin*, 1979, *10* (1 & 2), 9-11.

Traces the history of racism in textbooks and in literature in the United States from the early 1880's when racist stereotypes of the African American began to emerge. Specific works of George Fitzhugh, Edgar Allan Poe, Joel Chandler Harris, and Thomas Nelson Page were cited as examples of racism. Banfield considered racism in children's materials not a personal aberration on the part of an individual author but a reflection of institutionalized racism that pervades American society.

Interracial Books for Children (ROBERT B. MOORE, Project Coordinator). *Stereotypes, distortions and omissions in U.S. history textbooks*. New York: 1977.

Evaluates the treatment of African Americans, Asian Americans, Chicanos, native Americans, Puerto Ricans, and women in a number of post-1970 history textbooks. Analyses are done separately for the six separate groups. The findings lead the authors to conclude that textbooks are dominated by a perspective that is white, upperclass, and male.

Hawkins, Michael L. Pictorial bias in elementary social studies textbooks. *The Negro Educational Review*, July/October 1978, *29*, 220-224.

Determines the extent to which whites, Blacks, Hispanos, Orientals, and American Indians, as well as males and females, are pictured in six elementary social studies series of textbooks. A third of each of thirty-six books was analyzed by counting the number of each group represented in the pictures. The percents of pictorial representations in the books were compared with those in the United States population. No book contained a larger percent of whites than found in the population, but no series was close to the female proportion of the population. Although the textbooks are predominantly white, all books include representations of non-white groups, some exceeding the population statistics.

Chall, Jeanne S.; Radwin, Eugene; French, Valarie W.; & Hall, Cynthia R. Blacks in the world of children's books. *The Reading Teacher*, February 1979, *32*, 527-533.

Replicates Larrick's 1965 study to determine the quantity and quality of children's trade books published in 1973-75 containing Black characters. A questionnaire was submitted to fifty-eight publishing firms (fifty-one returns) for information concerning the number of trade books published each year and the number and titles of books including Black characters. From the books listed, a random sample of approximately one-sixth was analyzed for the depiction of Black characters. In contrast with the findings of the earlier study, the content analysis revealed that in the later period Blacks were represented in a variety of settings; were well-represented in numbers in fiction, nonfiction, and books on social and historical issues; and were generally given important roles. The researchers concluded that still much needs to be done in regard to both quantity and quality of Black representation in children's books.

Kuya, Dorothy. Racism in Great Britain: A Black Briton's perspective. *Interracial Books for Children Bulletin*, 1979, *10* (1 & 2), 12, 14.

Presents brief case studies of four British children's books which include racist stereotypes and distorted information about Third World people. Omissions of information, such as slavery in early Britain and the slave trade, are noted as are chapter headings in books which are imperialistic.

Lupke, Rolf. Third World stereotypes in FRG religious materials. *Interracial Books for Children Bulletin*, 1979, *10* (1 & 2), 15-17.

Surveys thirty-three religious tenth grade textbooks, published between 1970 and 1978 and used in the Federal Republic of Germany, for images of Third World people. Almost all were found to be racist in their portrayal of Third World people and their relationships with West Germans. No insight is given concerning discriminating practices in German society. Third World people are referred to as *the people, the poor, other people, people in need, tribes, heathen, natives, the primitive race*. The poverty cycle, help given to Third World people by "rich" nations, and Eurocentricism are emphasized.

STROTHER, T. ELLA. The Black image in the Chicago 'Defender,' 1905-1975. *Journalism History*, Winter 1977-1978, *4*, 137-141, 156.

Analyzes the image of Blacks in one of the oldest and largest Black presses. Personalities appearing in the weekend editions from 1905 to 1975 were categorized according to sex, race, occupations, reasons for being in the news, the section of the paper in which they appeared, and the time period. Stratified random sampling resulted in an analysis of 2,177 personality stories, 1,838 being about Blacks. In the earlier periods all personalities were identified according to race and judged good or bad. Blacks experienced the most success in sports and entertainment but made strides in politics, civil rights, and education. The overall image presented in the *Defender* is one of Black citizens demonstrating racial pride through their accomplishments and contributions to society.

YOUNG, ANN VENTURE. The Black woman in Afro-Caribbean poetry. In Miriam DeCosta (Ed.) *Blacks in Hispanic Literature*. Port Washington, New York: Kennikat Press, 1977. 137-142.

Describes the images of Black women as portrayed in Afro-Caribbean poetry. They are often compared with fruits or vegetables and symbolize musical instruments, African dances, or the homeland. Earlier poets stressed physical characteristics of these women. Examples of poetry in which the Black women are portrayed are included in the discussion.

JACKSON, SHIRLEY M. Fact from fiction: another look at slavery in three Spanish-American novels. In Miriam DeCosta (Ed.) *Blacks in Hispanic Literature*. Port Washington, New York: Kennikat Prss, 1977. 83-89.

Shows through case studies how slavery was depicted in two Spanish American novels and one short story. Each includes the experiences of people of African ancestry in the New World, especially those at the end of the slave period. Through summaries of the novels and the short story, aspects of slavery often overlooked are revealed, such as the philosophies and doctrines of the church and state, the customs of the people concerning racial relationships, and the prices African people paid for their freedom. The literary works reviewed present a fairly accurate history of the African people in America.

GARCIA, JESUS. Native Americans in U.S. history textbooks: from bloody savages to heroic chiefs. *Journal of American Indian Education*, January 1978, *17*, 15-19.

Compares the treatment of native Americans in five state-adopted eighth grade United States history textbooks with that identified in American literature books by another researcher. The content was evaluated according to the identification of events or themes reflecting major involvement between white and native Americans, application of themes identified in another study to American history textbooks, and terms commonly associated with native Americans. The results substantiated the depiction of American Indians identified earlier as being limited to six general derogatory areas.

Laishley, Jennie. The images of blacks and whites in the children's media. In Charles Husband (Ed.) *White media & black Britain: a critical look at the role of the media in race relations today.* London: Arrow Books, 1975. 69-89.

Surveys comic books, children's trade books, and textbooks available in Great Britain for images of people other than whites and the effect the children's print media has on Black children. Black characters appeared in twenty of the 162 comics analyzed and are portrayed in a degrading manner. Fiction generally has all white characters with Black Africans being badly represented. There is a dearth of characters from other countries and races, usually appearing as minor characters only. School textbooks were criticized because they were outdated and presented biased accounts of events and inaccurate or prejudiced images of black groups. Criteria for judging children's materials were included in the report.

Hedge, Ann, & Davies, Ann Marie. Images of Africa in British history texts. *Interracial Books for Children Bulletin*, 1979, *10*, (4), 11-14.

Analyzes 210 British history books for the treatment of slavery and the liberation struggles in African history. The greatest problem identified was the omission of information especially about Africa and Black people. The treatment of slavery is unbalanced and insulting; in most of the textbooks patronizing and offensive references and terminology were used. Biased views of recent events in Kenya were also found.

Falcon, Luis Nieves. The function of racism in Puerto Rican textbooks. *Interracial Books for Children Bulletin*, 1979, *10*, (1 & 2), 19-20.

Reports findings of an analysis of content in textbooks used in Puerto Rican schools. The techniques used most by writers are those of omission or misrepresentation of information. The content and illustrations reflect the values, life styles, and language of upperclass society and are classicist, racist, and sexist. Black characters appear for the first time in fourth grade materials. The depiction of female characters follows traditional sex roles. Textbooks convey colonialism by omitting Puerto Rico's past history and glorifying the history of the United States. It was concluded that the textbooks presented ideological content intended to perpetuate the political and economic subordination of Puerto Ricans.

Lutz, Hartmut. The image of the American Indian in German literature. *Interracial Books for Children Bulletin*, 1979, *10* (1 & 2), 17-18.

Presents an analysis of the portrayal and position of American Indians in selected German books for children and youth. The American Indians are presented more frequently and less negatively in Germany than other minority people and more positively shown than in American literature although many of the American cliches are adopted. The books written by Karl May, which appeared in 1892, have been important in German education and have shaped the German image of the American Indian. Currently, *Bury My Heart at Wounded Knee* has renewed German interest in native American affairs.

Lippmann, Lorna. The invisible people of Australian History. *Interracial Books for Children Bulletin*, 1979, *10*, (1 & 2), 14-15.

Analyzes twelve Australian textbooks for inaccuracies and evidence of racism. Examples were cited from these books concerning the descriptions and stereotyping of Aborigines. The positive aspects of Aboriginal life have been ignored or ridiculed. Many history books presented an Eurocentric and onesided account of early race relations in Australia. It was concluded that the majority of Australian books perpetuated both racism and inaccuracies.

McAulay, J. D. Evaluation of textbook content on southeast Asia. *The Clearing House*, November 1978, *52*, 105-106.

Examines seven social studies textbooks in use in a tenth grade unit on Southeast Asia in five randomly selected Pennsylvania high schools. Fourteen graduate students in education evaluated the books for the accuracy of the presentation of the mores and customs of the people and the history and typography of the regions. It was concluded that the textbooks examined did not give a realistic picture of the people of Southeastern Asia and that too much emphasis was placed on life during the period of colonialism.

Sarvan, Charles Ponnuthurai. The Asians in African literature. *Journal of Commonwealth Literature*, December 1976, *11*, 160-170.

Reviews selected pieces of Black African literature, primarily novels, to determine the treatment of Asians, and to a lesser extent, Europeans. The scattered references to Asians tend to be unfavorable and perpetuate beliefs and prejudices. African novels are divided between those dealing with a colonial theme and post-independence disillusionment. Throughout the report events and ideas are tied to actual happenings in African history.

Zak, Itai, & Kaufman, Shlomit. Sex-stereotypes in Israeli primers: a content analysis approach. *Studies in Educational Evaluation*, Spring 1977, 3, 27-37.

Examines six primary readers used in the Israeli school system for sexual stereotyping. The sample contained 20 percent (or 236) of the literary units taken from 1180 Item Units (an entire selection, such as an article or story, which is a separate unit in the content of the book), the Item Units being selected at random and being concerned with human beings. Frequencies of occurrence of personality traits within each unit were counted for males and females according to each of the sixteen traits of Cattell. The differences for males and females were significant for twelve of the sixteen traits. When these differences were compared to those found in Israeli population, nine were found to be significant. The investigators concluded that the primary readers presented a stereotypic account of personality not found in real life.

GREENLAW, M. JEAN. The image of foreign-born persons in recent fiction published in the United States for children between the ages of four and eight. In Dina Feitelson (Ed.) *Cross-cultural perspectives on reading and reading research.* Newark, Delaware: International Reading Association, 1978. 103-114.

Ascertains whether there is a difference between American and non-American writers of fiction in their portrayal of characters in settings other than the United States. Twelve books by non-Americans and twelve of the seventeen by Americans were content analyzed. Chi-square was used to determine the difference in the portrayal of characters in foreign settings by the two groups of writers. No significant differences were found on negative implicit and explicit concepts or the representation of adults and children as major or minor characters. American authors tended to describe characters as poor, less well-educated, in a low social class, and Black more often than non-Americans. The books analyzed were published between 1970 and 1976 and were intended for children from preschool through third grade.

ROOT, SHELTON L., JR. A comparison of realistic contemporary fiction by non-American and American authors for children nine through twelve years of age. In Dina Feitelson (Ed.) *Cross-cultural perspectives on reading and reading research.* Newark, Delaware: International Reading Association, 1978. 115-125.

Analyzes ten juvenile fiction books for American and ten for non-American authors to determine any differences concerning settings, and major characters outside the United States. Chi-square was used to determine differences of the two classifications of authors for eleven categories. No significant differences were found for the presentation of positive and negative concepts, ages, sex, educational level, ethnic groups, goals, personality traits, positive and negative characteristics, and positive and negative stereotypes of major and minor characters. Significant differences were found in the economic status and social class of the characters, with American authors dealing with lower socioeconomic class more than non-American authors did.

BECKER, JORG. Anti-semitism in German children's materials. *Interracial Books for Children Bulletin*, 1979, *10* (1 & 2), 11-12.

Looks at the treatment of anti-semitism in books and refers to studies on the racist treatment of Third World peoples in books.

AZEVEDO, MILTON M. Trends in elementary Spanish texts. *Modern Language Journal*, December 1978, *62*, 399-407.

Surveys a sample of first-year college textbooks published in the seventies to determine their salient characteristics as indicators of current methodological trends. It was found that textbooks differ widely in respect to content, design, and organization. There is a tendency for grammar coverage to be traditional and comprehensive, for listening to receive more conscious attention, and for review sections to be included. Variation was noted concerning vocabulary control, explicit presentation of culture, sequences of grammar, workbooks accompanying the texts, and contents in instructors' manuals.

MOREAU, PAUL HENRI, & PFISTER, GUENTER G. An analysis of the deep cultural aspects in second-year college French textbooks published from 1972 to 1974, *Foreign Language Annals*, April 1978, *11*, 165-171.

Develops a plan to evaluate French deep culture and applies it to ten intermediate college French texts published between 1972 and 1974. Included in the evaluation design were criteria to determine the adequacy or inadequacy of the presentation of information concerned with human nature, social relations, man and nature, time, and space. Each division was subdivided into appropriate concepts. Seven specific concepts were deemed necessary for the textbook to be rated adequate: individualism, liberty, family ties, youth culture, social stratification, past versus present, Paris versus provinces. The best represented characteristics were individualism, common sense, liberty, and intellectuality. Only one textbook was considered adequate in conveying deep French culture to the students.

BURNS, ROGER G., & RUPIPER, OMER J. Trends in school psychology as demonstrated by content analysis of school psychology textbooks. *Psychology in the Schools*, July 1977, *14*, 332-340.

Analyzes seventeen school psychology textbooks to ascertain general and specific trends in three time periods between 1960 and 1975. The measurement unit was a page count apportioned to twenty five content categories; page counts were converted to percentages, the latter being used to indicate change. The areas of content that showed greatest emphasis and remained relatively the same were assessment emphasis, clinical-personality, special education, and general therapy. Those which were consistently low were group assessment, curriculum development, sex education, teaching psychology, and group therapy. Increased publication in the area of remediation was observed.

BERTHOLD, HOWARD C., JR. Psychology and the introductory text: the view from the reference section. *Teaching of Psychology*, February 1977, *4*, 36-39.

Analyzes sources from which writers of thirty four introductory psychology textbooks published between 1970 and 1975 gained their information. The data obtained were compared to two rankings of sixty-four journals previously done, one by departmental chairmen of graduate psychology programs and the other by the frequency with which these journals were cited in three psychological periodicals. Percentages of the citations to the sixty four journals were recorded for each text; journals were ranked according to the mean percentage of citations across the thirty four textbooks. Statistical significance was found for the three rankings by the Kendall Coefficient of Concordance. Further analysis revealed a number of discrepancies.

Perlman, Daniel. Eight social psychology texts: a citations analysis. *Canadian Psychological Review*, January 1979, *20*, 38-47.

Compares references and author indices in eight recent social psychology textbooks to determine the journals from which cited materials came, the social psychologists cited who belong to a common set of scholars, scholars cited the most frequently, and the emphases found in the citation patterns. The number, date, and types of material were tabulated for each textbook. A description of citations is given for each textbook. The textbooks differed on their theoretical orientation, their emphasis on groups, their citations of Canadians, and their coverage of different social topics. The analysis revealed American domination in the textbooks, but no evidence of discrimination against Canadians was found.

Dunne, Eugene E., & L'Abate, Luciano. The family taboo in psychology textbooks. *Teaching of Psychology*, October 1978, *5*, 115-117.

Ascertains the frequency of page references for family-related concepts in sixty psychology textbooks in six different areas of psychological specializations: child, exceptional child, adolescence, personality, social, abnormal. The mean percentages of family references were greater when the area was child-related. When the area is more empirical, such as social and personality, the percentage of family-related references is smaller than for less empirical areas, such as child or adolescence. Scant attention was given to the family-related concepts of family, marriage, mother and father roles, and birth order.

Levin, Florence S., & Lindbeck, Joy S. An analysis of selected biology textbooks for the treatment of controversial issues and biosocial problems. *Journal of Research in Science Teaching*, May 1979, *16*, 199-203.

Examines the coverage of eleven controversial issues and biosocial problems in five recent biology textbooks. Quantitative ratings, based upon the total number of pages, were determined for each subtopic within each category. Qualitative ratings were based upon a Likert-type scale, ranging from no treatment to outstanding treatment. The major conclusion was that the textbooks analyzed differed greatly in the treatment of controversial issues and that no one textbook provides adequate treatment of all of the issues.

Douglas, Ann. Heaven our home: consolation literature in the northern United States, 1830-1880. *American Quarterly*, December 1974, *26*, 496-515.

Interprets deathbed scenes and celestial communications of consolation literature of mid-nineteenth century in America, written largely by liberal clergymen and women. Death, grief, funeral rites, especially of children and young women, and life after death were stressed in both fiction and hymns. Brief case studies of the consolation literature are included in the report.

Tedesco, John L. The white character in black drama, 1955-1970: description and rhetorical function. *Communication Monographs*, March 1978, *45*, 64-74.

Identified four white character types in Black drama: the pathetic dupe, the Southern buffoon, the savage exploiter, and the would-be ally. The eighty white characters analyzed were drawn from over 100 scripts by Black writers produced and published between 1955 and 1970. It was concluded that all white characters analyzed functioned to demythologize the image of white America. These images depict a culture that is neither superior to nor worthy of imitation by Blacks.

Sears, Robert R.; Lapidus, Deborah; & Cozzens, Christine. Content analysis of Mark Twain's novels and letters as a biographical method. *Poetics*, June 1978, *7*, 155-175.

Content analyzes two kinds of writing by Mark Twain: fantasy as represented by nine novels written between 1868 and 1900 and his published letters written during the same period to four people who differed from each other in their emotional relationships to him. The purpose of the analysis was to gain an understanding of one aspect of Twain's personality: love and anxiety about separation from loved ones and the relation of these developments to events that impinged upon him. The novels were separated into 599 episodes which along with the letters were coded into nine categories. From the analysis the investigators accounted for the ebb and flow of Twain's affectional feelings, insecurities, and anxieties for approximately three decades of his life.

FitzGerald, Frances. Onward and upward with the arts: rewriting American History - II. *The New Yorker*, March 5, 1979, *55*, 40-91.

Compares content and its treatment in American history textbooks published in the late sixties and early seventies with those published in the past. The writer concluded that current books show a sense of uncertainty, especially concerning an American identity. Various topics are analyzed and interpreted within the report; for example, European immigration, melting-pot concept of America, civil rights movement, Reconstruction period, North American Indians, struggles of non-white people, economic history, attitude towards children, Vietnam War, American foreign policy. Problems of modern writers and publishers of American history books are detailed.

Martindale, Colin. The evolution of English poetry. *Poetics*, June 1978, *7*, 231-248.

Reports the results of a computer-based content analysis of poems by eighty eight English poets between 1490 and 1949 and a control series of non-literary prose written between 1770 and 1970. The time period was divided into twenty-three 20-year periods; random samples of poetic works by the two most eminent poets for the first two periods and the four for later periods were analyzed by recording the number and kinds of words and phrases in the first eight lines of their poetry. The results showed that for poetry the indices of primary process content, concreteness, and lexical diversity increased linearly across time. None of these variables differed significantly across time for non-poetic texts.

HAUSER, CARL. Education for mildly handicapped adolescents: structure and quality of published information from the past decade. *Journal of Special Education*, Fall 1978, *12*, 285-301.

Categorizes 125 articles published between 1969 and 1977 concerned with mildly handicapped adolescents into four major categories: academic skills development, career development/vocational training or both, support base (data-based, non-data-based), and handicapping conditions addressed behavior disordered/emotionally disturbed, educable mentally handicapped, learning disabled). Although the total number of articles increased slightly since 1968, no consistent upward or downward trends appeared for any of the categories. Data-based reports were often based on weak research designs. No replications or follow-up studies based upon stronger studies have been done.

FOWLER, BRIDGET. 'True to me always': an analysis of women's magazine fiction. *British Journal of Sociology*, March 1979, *30*, 91-119.

Explores plot structures and images of society in fiction published in popular twopenny magazines for women, sampled at 4-weekly intervals from mid-1929 to mid-1930. The eleven magazines were those purchased chiefly by working class readers. Two general magazines were also sampled as well as two bought by the middle class, the latter used as controls. Stories were classified by types of romantic plots, such as domestic stories, competition, discovery of reality with happiness, class differences, rewards of sacrifices. Elements considered within the stories were the importance of work ethics, frequency of social mobility, wealth as the gratification of desire, and snobbery as a crucial problem in society. An analysis in depth of one story indicating devices used to signal the meaning of plot, character, and action is included.

EINSIEDEL, E. F., & BIBBEE, M. JANE. The news magazines and minority candidates—campaign '76. *Journalism Quarterly*, Spring 1979, *56*, 102-105.

Examines the coverage of minority presidential candidates in the 1976 election in *Newsweek*, *Time*, and *U.S. News and World Report* between the first week in September and the first week of November. In the twenty seven issues (nine for each magazine) 130 election stories about various candidates appeared. The unit of analysis used was the assertion, defined as a single thought unit taken from a segment of comment; each assertion was categorized as positive, negative, or neutral. Three stories appeared about McCarthy and two general articles about third-party candidates. The assertions about McCarthy were largely neutral, with only roughly a third being either negative or positive.

BERTILSON, H. S. Classics in psychophysiology: older journal articles and books cited frequently today in psychophysiology. *Psychophysiology*, November 1978, *15*, 604-605.

Analyzes references in *Psychophysiology* between 1972 and 1977 for books and journal articles published before 1954. More than 500 journal articles and books formed the data base. Items cited fewer than three times were dropped. Eleven sources were cited in three to seven articles, ranging in time from 1927 to 1953.

MERRITT, SHARYNE, & GROSS, HARRIET. Women's page/lifestyle editors: does sex make a difference? *Journalism Quarterly*, Autumn 1978, *55*, 508-514.

Compares women's/lifestyle pages edited by women with those edited by men in 171 metropolitan newspapers with circulation of more than 50,000. Information was gained by asking the editors to indicate if certain topics had been covered the previous year and to give estimates of the proportion of copy given to five categories: entertainment, food and fashion, social news, women's movement, and education. The sex of the editor influenced the coverage of male-oriented topics but had little influence on topics of direct interest to women. Men gave more coverage to entertainment, recreation and leisure, while women allotted more space for social news and the women's movement.

MOORE, MICHAEL. Discrimination or favoritism? Sex bias in book reviews. *American Psychologist*, October 1978, *33*, 936-938.

Analyzes 180 book reviews from the 1976-1977 issues of *Contemporary Psychology*, written by male, female, or male and female authors. One half of the reviews had been written by males; the other half, females. The reviews were rated for positive and negative elements, with the difference between these ratings regarded as the reviewer's net attitude toward the book. In regard to positive elements, a significant interaction was found between authors' sex and reviewers' sex. Own-sex books were more favorably evaluated than other-sex books; books of combined authorship fell in between. Reviewers of both sexes tended to find more negative elements in books by male than by female authors.

BRADDOCK-ROGERS, KENNETH, & BRADDOCK, KENNETH MACKENZIE. Science errors in the communication media. *School Science and Mathematics*, November 1978, *78*, 593-602.

Reports science errors based upon a qualitative analysis of newspapers, fiction, sermons, church bulletins, television programs, motion pictures, and the like. They found that three errors or misconceptions are found more frequently than others: that planets are stars, that steam can be seen and photographed, and that volts pass through objects. Examples of these and other errors pertaining to science are included in the report.

MYERS, DAVID S. Editorials and the economy in the 1976 presidential campaign. *Journalism Quarterly*, Winter 1978, *55*, 755-760.

Analyzes editorials in ten leading United States newspapers in a 57-day period to determine the amount and partisan direction devoted to economic issues and the 1976 presidential election. Election editorials were classified as Democratic, Republican, or neuter in leaning; column inches were used as measurement units for comparisons in the study. Of the forty-eight issues discussed, sixteen were about foreign affairs and thirty-two about domestic affairs, the economy receiving the most comment. The partisan direction of the editorials concerned with economic issues favored the Republicans (28.3 percent) over the Democrats (21.7 percent); one half were neuter in nature. Examples of comments concerned with different aspects of the economy are included.

PRAKASH, JOY. Editorials of four leading national dailies. *The Word*, Annual 1977, No. 13, 8-12.

Studies editorials in the four largest dailies in circulation in India during December, 1975. Reports of the analyses were given for each newspaper separately concerning the number of editorials, geographical distribution of the content of the editorials, and the content. Common characteristics included a rather clear but not exhaustive understanding of national and foreign affairs; the editorials spoke strongly about international terrorism and pollution. They differed in many other respects.

SPARKES, VERNONE M. The flow of news between Canada and the United States. *Journalism Quarterly*, Summer 1978, *55*, 260-268.

Analyzes ten Canadian and twenty-nine United States newspapers, selected on the basis of circulation size and geographic distribution, for two randomly drawn weeks to determine the news flow between the United States and Canada. In a total of 342 daily issues of American papers and 110 of Canadian ones, domestic news and foreign news were coded for the first week and foreign news only for the second week. The Canadian papers devoted 27.6 percent of the space to foreign news; the American newspapers, 11.9 percent. Canada devoted 49.5 percent of its foreign newshole and 13.5 percent of the total newshole to the United States. The American press devoted 2.3 percent of its foreign news space to Canada which is approximately .2 percent of all news carried.

HALE, F. DENNIS. A comparison of coverage of speech and press verdicts of Supreme Court. *Journalism Quarterly*, Spring 1979, *56*, 43-47.

Studies randomly selected twenty press and twenty speech law cases concerned with freedom of expression as published in ten newspapers. Accounts primarily devoted to the substance of the court decisions published within three days after the decisions were coded for the decision, column length in inches, front page location, and headline containing the decision. Editorials were examined for ten days after a decision for timeliness and opinions expressed. The ten newspapers provided significantly different amounts of coverage of the decisions with the *Washington Post* and the *New York Times* being the leaders. The *Post* and the *Chicago Tribune* published the most editorials. The ten newspapers combined gave significantly greater coverage to and favored free expression more in press than speech decisions.

HICKS, RONALD G., & FEATHERSTON, JAMES S. Duplication of newspaper content in contrasting ownership situations. *Journalism Quarterly*, Autumn 1978, *55*, 549-553.

Determines the extent of duplication of news content in morning and afternoon newspapers in three Louisiana cities, two pairs being jointly owned and one pair, separately owned. Through content analysis the morning and afternoon papers were compared to ascertain duplication of hard news (major stories), soft news (feature stories), and information-utility items (how-to-do-it features, advice.) Opinion content was also compared. It was concluded that in all three cities studied, the readers of the two papers received two distinct products in appearance and non-duplicated content, although there are similarities in the general kinds of news published. No duplication was found in the opinion content, letters to the editor, or features. The type of ownership made little difference in the content.

FOWLER, GILBERT LEN, JR. Predicting political news coverage by newspaper characteristics. *Journalism Quarterly*, Spring 1979, *56*, 172-175.

Analyzes campaign coverage for the 1972 senatorial primary election in thirty-five Arkansas daily newspapers to determine if seven variables would account for variance in the amount of political campaign news. The predictor variables (size of the weekday news hole, number of wire services, operation on a morning or evening cycle, candidate endorsement, political classification, and number of days published per week) were entered into the regression equation in stepwise order. The size of the news hole accounted for 69 percent of the variance in total column inches of news space, followed by the number of wire services used. The remainder of the variables did not add significantly to the prediction.

SHERIZEN, SANFORD. Social creation of crime news: all the news fitted to print. In Charles Winick (Ed.) *Deviance and mass media* (Vol. 2). Beverly Hills, California: Sage Publications, 1978. 203-224.

Considers the content of crime news in three metropolitan and one Black community newspaper in one American city. The stories in the final edition of each daily paper for every third month during 1975 were coded into ten categories. Over 15,000 items in over 1,000 crime stories were classified. The percentages of all crimes known to the police were compared to those reported in the newspapers to determine the amount of crime news shrinkage. The news shrinkage varied with the crimes with the least occurring for murder/manslaughter. Certain crimes and certain aspects of the criminal justice system were emphasized while others were not considered. Victims of crimes were almost invisible. The main sources of crime news were the police and public records. Crime stories were most often found on the first three pages.

DOMINICK, JOSEPH R. Crime and law enforcement in the mass media. In Charles Winick (Ed.) *Deviance and mass media* (Vol. 2). Beverly Hills, California: Sage Publications, 1978. 105-128.

Examines the research literature concerning crime and law enforcement as reported and portrayed in the mass media, particularly newspapers and television.

Singletary, Michael W. Newspaper photographs: a content analysis, 1936-76. *Journalism Quarterly*, Autumn 1978, *55*, 585-589.

Identifies changes in newspaper photography in six United States metropolitan newspapers. First-page photographs of each newspaper were analyzed for one week of each month for the years 1936, 1956, and 1976 as to size, subject, source, location on the page, racial and sex composition, and accompanying (or lack of) article. The 1,892 photos were assigned to fourteen content categories. The strongest changes were among photos involving crime-corruption, accident-disaster, human interest, and public affairs-politics. Nearly all photographs were accompanied by an article, but an increasing number of photos were used alone. Mixed-race and both-sex photos increased in numbers.

Green, Barbara, & Hurwitz, Leon. Press views of executive vs. senatorial powers. *Journalism Quarterly*, Winter 1978, *55*, 775-778.

Analyzes content in two metropolitan newspapers of differing political views to determine if, under two times of clash between the U.S. Senate and the Executive branch, newspapers displayed a consistent bias in editorials, opinion columns, letters to the editor, and news stories and if the interpretations of fundamental issues were determined by the newspapers' reaction to specific politicians and situations. Items appearing within two and three months in 1954 and 1973 were coded according to display and directional analyses (favorable, unfavorable, neutral). In both confrontations the newspapers took opposite points of view with one newspaper presenting an unbalanced point of view in one situation and the reverse being true in the other. Both were less biased in 1973 than in 1954, especially in news articles.

Pollock, John Crothers; Robinson, James Lee, Jr.; & Murray, Mary Carmel. Media agendas and human rights: the Supreme Court decision on abortion. *Journalism Quarterly*, Autumn 1978, *55*, 544-548, 561.

Analyzes the coverage of a Supreme Court decision on abortion by five major newspapers to determine if the reports are similar. Two scores were assigned to each of 209 articles printed for one month in 1973: display characteristics and story's information source. The content of the articles was analyzed as legitimizing, deligitimizing, and neutral. To determine possible reasons for the variations found among the papers, four factors (religion, income, race, abortion rate in the city of publication) were compared with the rank-ordering of the newspapers based upon the first analysis. All four factors were related to the stance taken by the newspapers on abortion. No evidence of a national agenda was found.

Hobbie, Barbara. *Oil company divestiture and the press: economic vs. journalistic perceptions.* New York: Praeger Publishers, 1977.

Uses content analysis of press articles and statistical analysis of a questionnaire sent to academic economists and newspaper or magazine editors and writers in examining how the press covered the oil company monopoly/divestiture debate. In particular, the accuracy of the press's depiction of the issues was determined. The study began with a brief overview of muckraking and criticisms of the oil industry, then examined journal coverage of the issue, and finally gauged the agreement/disagreement on the issue between experts and the press. Business periodicals, news magazines, and news/opinion publications were covered in the content analysis. The four business periodicals reviewed appeared to be balanced between those that tended to be pro-industry and those that tended to be anti-industry. All, however, tended to show both points of view. The three news magazines analyzed provided a number of brief articles on the issues. They maintained a fairly high level of objectivity in commenting upon news reports, but they also tended to reflect general confusion and did not dig behind the scenes. The four opinion publications were strongly biased in their viewpoints. Nearly all periodicals ignored the testimony of experts who had made extensive studies of the oil industry. A second aspect of the study involved the analysis of a questionnaire responded to by fifty two economists and thirty one journalists. A number of sharp differences were found between the two groups on oil monopoly/divestiture issues. The author concluded that the information periodical readers receive is often incomplete and possibly distorted or misrepresented.

Grunig, James E. Review of research on environmental public relations. *Public Relations Review*, Fall 1977, *3*(3), 36-58.

Reviews the research on ways in which the media covered environmental issues and the theoretical literature which attempts to explain public behavior in relation to the environment. The literature reviewed was concerned with how public relations practitioners responded to environmental issues, how concerned the public was with the environment, how the media covered environmental problems, and the effectiveness of communication theories to explain environmental communication. The data showed that people behaved differently in different types of situations. It is only when a situation includes nearly everyone personally or when there is much conflict that people picture themselves as involved. The media depend upon press releases rather than their own investigations in regard to environmental issues.

Blake, Joseph A.; Stump, Alan; & King, Terrie. Conceptualization of collective behavior events in the *New York Times*. Journalism Quarterly, Autumn 1978, *55*, 540-543, 599.

Studies the front pages of every issue of the *New York Times* for the years 1960, 1965, and 1968 for collective behavior concepts. Headlines were first scanned for the use of nine key words often used to characterize collective behavior. News items were analyzed for references to collective behavior, the presence of a control agency, and eight themes: spontaneity, out-of-the-ordinary, depersonalization, emotionality, use of animal analogies, use of unit terms, violence. The Spearman rank-order correlation was used to test the hypotheses. The results showed a significant correlation between the presence of control agents, reported violence, and the attribution of spontaneity.

DONOHUE, THOMAS R., & GLASSER, THEODORE L. Homogeneity in coverage of Connecticut newspapers. *Journalism Quarterly*, Autumn 1978, *55*, 592-596.

Determines sources of news (United Press International, Associated Press, staff, staff and byline) about a governor in 1,009 stories in twelve daily Connecticut newspapers during three-month periods in 1967 and 1976. Significantly higher utilization of local and regional wire services was found for 1976 than 1967. During the later period the large increase in the use of UPI wire copy and a substantial decrease in the use of staff and bylined articles was found with the use of AP copy remaining almost unchanged. A significantly higher utilization of wire service than staff-generated copies was found for both years.

BROVALD, WALTER H. Issue coverage weak. *Grassroots Editor*, Summer 1978, 7-9, 15.

Studies approximately 200 items in thirty six Minnesota newspapers during a 9-week period in 1977 for coverage of proposed federal guidelines for hospitals. The analysis was divided into five time periods, each beginning with a major, relevant news development. One of the dailies reported each important event and another, nine items. Only three non-daily newspapers provided consistent coverage of the issue which was urgent for the state. Coverage was more consistent in the dailies.

HALE, F. DENNIS. Press releases vs. newspaper coverage of California Supreme Court decisions. *Journalism Quarterly*, Winter 1978, *55*, 696-702, 710.

Determines if some types of state appellate court decisions received significantly greater amounts of coverage in court-prepared press releases and if these same types of decisions were emphasized in ten California daily newspapers in 1972. Newspapers were examined for three days after each of the 139 final decisions of the California Supreme Court had been made. Coverage was compared for individual and combined newspapers and for court releases. Zero-order correlations contrasted the direction of the association between twenty six variables that described the decisions and the amount of coverage; partial correlations determined if any characteristics were described more or less than in the court releases. Although there were extreme differences in the amount of court coverage among newspapers, the dailies differed little from each other or the court releases in the kind of court coverage.

PALETZ, DAVID L., & LAFIURA, DENNIS. The press and authority: portrayals of a coach and a mayor. *Journalism Monographs*, August 1977, No. 50. Lexington, Kentucky: Association for Education in Journalism. 1-29.

Investigates the media-authority relationship through a comparison of the nature and possible effects of a newspaper's coverage of a former university basketball coach and a mayor of the same city. Each sentence appearing in any part of the newspaper concerned with either person during one year was content analyzed. The mayor received less coverage (268 sentences vs. 860 sentences), and was quoted less and criticized more than the coach. In a survey 100 percent of the students and 83 percent of the non-students identified the coach correctly but only 43 percent of the students and 53 percent of the non-students identified the mayor correctly. The coach lost his authority and resigned. It was concluded that favorable coverage does not necessarily enable a public figure to retain his authority and that favorable treatment can be counter-productive.

LEE, RAYMOND S. H. Early Korean war coverage. *Journalism Quarterly*, Winter 1978, *55*, 789-791.

Compares the themes of war-front news reported in four representative South Korean and two United State newspapers during the first sixteen days of the Korean War. The major themes were categorized as favorable, unfavorable, and neutral towards the South Korean and/or United States troops. Frequencies of themes were noted for each paper and for total Korean and United States papers. In the Korean papers 86 percent of the themes were favorable to both troops; none were unfavorable. The United States newspapers more accurately reflected the front line situation than did South Korean papers which contradicted reality. Significant difference in the coverage of war-front news was found between South Korean and United States newspapers.

EMERY, MICHAEL, & EMERY, SUZANNE STEINER. Reporting proposition 13: business as usual. *Columbia Journalism Review*, November-December 1978, *17*, 31-33.

Examines 464 stories in the news and opinion sections of seventeen California newspapers for a period of almost two weeks for the coverage of Proposition 13 and its rival, Proposition 8. The analysis revealed that these newspapers generated very few articles concerning possible effects of either proposition, the significance of the budget surplus, and Proposition 8. Casual treatment was given to the statistics. The coverage prior to the election was termed "bulletin-board journalism."

KARMEN, ANDREW. How much heat? How much light: coverage of New York City's blackout and looting in the print media. In Charles Winick (Ed.) *Deviance and mass media* (Vol. 2). Beverly Hills, California: Sage Publications, 1978, 179-200.

Content analyzes forty five articles concerning looting during a 1977 New York blackout and appearing in nationally distributed periodicals with different acknowledged political and racial outlooks. Data from analyses by social scientists about the lootings, data on the looters from a criminal agency, and opinion poll results were used to evaluate the content of the articles. To gain a composite picture of editorial comment, the articles were analyzed according to the profiles of the participants and the victims and reasons given for the looting. Karmen concluded that the commentators made little attempt to understand the participants' behavior or reasons for it and closely identified with the victims. The findings of social science research were largely ignored.

QUARTARARO, LUCIE. Higher education coverage in Boston newspapers: a content analysis. *Research in Higher Education*, 1978, *9*(2), 151-159.

Assesses higher education articles published in two metropolitan daily newspapers during a one-month period, April, 1977. The articles (142 in the *Globe* and 125 in the *Herald*) were measured and assigned to one of eight major categories: sports, features, news, editorials, columns, news analysis, reviews, and photographs. Both newspapers carried more day-to-day spot news than indepth feature articles about the major issues and trends facing higher education. Little coverage was given to editorials, columns, news analysis articles, and reviews. The greatest amount of coverage was given to the most prestigious, well-known universities. Stories with bylines were written by general staff reporters, not education reporters.

LENT, JOHN A., & RAO, SHANTI. A content analysis of national media coverage of Asian news and information. *Gazette*, 1979, *25*(1), 17-22.

Investigates the coverage of Asian news in six issues of each of the *New York Times* and the *Washington Post*, one issue of *Newsweek*, six broadcasts of network news. In the *Times* 4.1 percent of the 991 news-information items dealt with Asia; in the *Post* 4.6 percent of the 1,017 items; in *Newsweek*, 7.6 percent of the thirty four pages of news/information; television network news, 8.5 percent of the total time. The largest amount of news in the print media was political-governmental in nature. Most of the Asian news had implications for the United States. It was concluded that the American reader probably doesn't receive a very broad perspective of Asian news.

HARTGEN, STEPHEN. How four U.S. papers covered the communist Chinese revolt. *Journalism Quarterly*, Spring 1979, *56*, 175-178.

Reviews four daily newspapers from different locations in the United States for two selected time periods in 1945 and 1946 to determine the extent and kind of coverage given to China. A 5-point scale of interpretative news was developed, ranging from a straight narrative of the events to judgmental stories advocating a position. Some commentary but not sustained analysis about China news was found in all four newspapers. The closeness of the event in terms of perceived relevance to American readers caused more interpretation than other news. Most of the items advocating stances was found in the editorial sections.

THOMPSON, DAVID C. The coverage of Canada in the U.S. news media. *Carleton Journalism Review* (special edition), Summer 1978, 1-24.

Analyzes methods by which the United States news media cover Canada and assesses the quality of the news reports on Canada available to the American public. The study focuses upon nine American daily newspapers, three major wire services, the three major televison and the major radio networks. News executives in the different media were interviewed on methods of gathering Canadian news, their perceptions of Canada as a news source, the relative priority of Canadian news in comparison with other foreign news, and the quality of their coverage of Canada. Stories were placed in broad categories. The general conclusion from this comprehensive study was that Americans received a rather poor quality of Canadian news coverage. Almost none of the areas of concern enumerated in a Canada-United States relations report were covered. The poor quality of news coverage is due to the scarcity of American journalists reporting in Canada and the inadequacies of the wire services.

Lee, Sang-Chul. The American image of relations with Japan projected in three U.S. Dailies. *Gazette*, 1979, *25*(1), 31-45.

Examines the image of Japan as found in a 35 week-day sample during a 7-month period of three U.S. metropolitan newspapers. Nine categories were used for the coding of the news items: economic activity; foreign relations; government, politics; defense, military; socio-environmental topics; science, medicine; culture; accidents, disasters; race. Items were also classified as to source; interpretation vs. hard-core news; favorable, unfavorable, neutral attitudes towards Japan. All three newspapers emphasized economic conflict, followed by disaster and accident news. Both the *New York Times* and the *Los Angeles Times* devoted more attention to Japanese news than did the *Chicago Tribune*. The tone exhibited was more negative than positive.

Belkaoui, Janice Monti. Images of Arabs and Israelis in the prestige press, 1966-74. *Journalism Quarterly*, Winter 1978, *55*, 732-738, 799.

Analyzes three news magazines and the *New York Times* and *New York Daily News* in regard to the images portrayed of Arab and Israeli leaders and citizens, events, and issues. A total of 442 articles published around the June, 1967, and October, 1973, wars was analyzed. Image was determined by two indicators: 1) verbs and adverbs synonymous with the words *said, tell,* and *ask* and judgmental adjectives and 2) descriptive phrases. Data were coded as favorable, unfavorable, netural; descriptive image content was also classified into thematic and role categories. Results were compared with Gallup Poll data on U.S. sentiments towards the two factions. The results of both the content analysis and poll data reveal shifting images of Arabs and Israelis.

Agha, Olfat Hassan. The role of mass communication in inter-state conflict: the Arab-Israeli war of October 6, 1973. *Gazette: International Journal for Mass Communication Studies*, 1978, *24*(3), 181-195.

Replicates a study of another researcher by using the same hypothesis, methodology, and research design but applying them to a different setting, the Arab-Israeli conflict and the October 6, 1973, war. Newspaper editorials in one Egyptian and one Israeli newspaper dealing with mutual relations were analyzed for three periods between September 13, 1973, and January 31, 1974. The editorials were analyzed along six dimensions, three reflecting trust and three reflecting suspicion of intentions. The results showed that when tension increased, the trust-suspicion ratio decreased; when tensions declined, more trust was shown for the opponents in the editorials. The major hypotheis was supported, that the countries involved in a conflict will exhibit more trust toward each other in times of relative normalcy in interstate relations than in times of tension or a crisis situation.

RUBIN, GAIL, & MAIER, PETER. Shortcomings are found in real estate sections. *Editor and Publisher*, April 22, 1978, 24 & 26.

Reports a study of Ralph Nader's Housing Research group in which real estate sections in forty-two major newspapers were analyzed. Conclusions were drawn regarding the news conveyed and readers' needs.

HOLMLÖV, P. G. Struggles over garbage. A qualitative approach to the study of news reporting on municipal government. *Gazette: International Journal for Mass Communication Studies*, 1978, *24*(3), 161-172.

Focuses upon newspaper accounts relating to a municipal government in Sweden. The four most frequently published topics in 1975 and 1976 were analyzed for the order of the persons introduced, the arguments they reportedly used to characterize the issues, and the way in which statements are attributed to them. From the qualitative analysis of forty-two articles, it was found that no occurrences were reported before they appeared on the agenda of municipal boards, that the events were treated as conflicts between human beings, and that the topics were not related to other events or the everyday lives of the readers.

ELLIOTT, PHILIP. Misreporting Ulster: news as a field-dressing. *New Society*, November 25, 1976, 398-401.

Analyzes content concerning Northern Ireland in the press, radio, and television of London, Dublin, and Belfast for similarities and differences in the reports carried by media having different policies. The study was conducted during two 3-week periods in 1974 and 1975 at times of major elections in Ulster. Most of the British news media, especially television, were concerned with violence more than with politics. Various examples of events and their treatment are included in the report.

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SKURNIK, W.A.E. Foreign news coverage in the Ivory Coast: a statistical profile of fraternite-matin. *Gazette: International Journal for Mass Communication Studies*, 1978, *24*(4), 271-282.

Describes the foreign news coverage of a sample of *Fraternite-Matin*, the daily newspaper of the Ivory Coast, for three months in 1975 and 1976. This newspaper carried an average of 15 to 20 percent of foreign news, or a monthly average of 464 articles of international news. The largest proportion of foreign news was devoted to events in sub-Saharan Africa. The articles about Africa were mainly concerned with the post-independence inter-African structure to which the Ivory Coast belongs and the problems of southern Africa. A large proportion of the news was concentrated in a small number of countries.

CHARLES, JEFF; SHORE, LARRY; & TODD, RUSTY. The *New York Times* coverage of equatorial and lower Africa. *Journal of Communication*, Spring 1979, *29*, 148-155.

Analyzes the *New York Times* for the first six months of 1960, 1965, 1970, and 1975 to determine how eighteen southern African nations were treated. The 1,673 news stories about these countries were coded into 11 categories. For the four years, three-fourths of the stories were about five nations (Angola, Kenya, South Africa, Rhodesia, Zaire) and were primarily concerned with civil disorders and revolutions. Coverage in general centered on activities of governments and political organizations with very few stories appearing on the front page. The most coverage was given to nations having the greatest amount of trade with the United States.

ROMANOW, W. I., & SODERLUND, W. D. The Southam press acquisition of the Windsor Star: a Canadian case study of change. *Gazette: International Journal for Mass Communication Studies*, 1978, *24*(4), 255-270.

Investigates changes in front page lead stories, editorials, editorial cartoons, and feature stories in a Canadian newspaper before and after a transfer of ownership. A content analysis was performed on 323 randomly selected issues of the newspaper over an 8-year period representing both periods of ownership to determine the areas of interest, source of content, and direction of partisan political commentary. Change of ownership did not affect change in interest in any consistent way. Two changes noted were more materials whose source was Canada and more content politically oriented.

CRESWELL, THOMAS J. *Usage in dictionaries and dictionaries of usage*. University, Alabama: American Dialect Society by University of Alabama Press, 1974.

Analyzes the status of usage of 318 words or expressions in the English language found in dictionaries and ten usage reference books, all reputed to be objective in nature. The first step was the analysis of the terms by 105 usage panel members who were sent at intervals over a 4-year period a series of questionnaires on usage items; the foregoing procedure preceded the publication of *The American Heritage Dictionary of the English Language*. The usage problems were classified in five categories: diction, grammar, word formation, idiom, spelling. Except for a small number of items in a few dictionaries or usage books, no consistency was found for the treatment of the 318 expressions; this finding led to the rejection of claims to objectivity of the works analyzed. The words and expressions evaluated are included in the report.

III-3 Readability

Fowler, Gilbert Len, Jr. The comparative readability of newspapers and novels. *Journalism Quarterly*, Autumn 1978, *55*, 589-592.

Compares the readability of front page news stories during three years (1904, 1933, 1965) with the readability of three best-seller novels in each of the time periods. When the Flesch readability formula was applied to 270 100-word samples, newspapers were found to be significantly more difficult than novels for all time periods. No significant differences in readability were found among the novels for the different time periods, but newspapers varied among the sample periods with the 1933 newspapers being significantly more difficult than those in 1904 and 1965.

Johns, Jerry L., & Wheat, Thomas E. Newspaper readability. *Reading World*, December 1978, *18*, 141-147.

Compares the overall readability and wire and non-wire readability of forty sports and political stories selected from Chicago newspapers during 1977. Both the Fry and the Dale-Chall readability formulas were used. Political stories were significantly more difficult (at least three grade levels) than sports stories, regardless of the source. Wire articles were approximately one grade level higher than non-wire articles, but the difference was not significant. The coefficient of correlation between the two readability formulas was .94.

Eberwein, Lowell D. The variability of readability of basal reader textbooks and how much teachers know about it. *Reading World*, March 1979, *18*, 259-272.

Reports the results of two studies which determined the variability of three series of basal readers from pre-primer through sixth grade and ascertained teachers' knowledge about the variability in readability of these books. Using the Harris-Jacobson Readability Formula with a randomly selected five percent sample of the pages in each of the books, the investigator found that the average range was 2.1 grade levels for preprimers to 7.6 levels for fourth, fifth, and sixth grade textbooks. Books did not become more progressively difficult from beginning to end. When teachers were given the information about textbooks, they found more variations than they had expected and were concerned about the educational implications of the variability.

Ames, Wilbur S., & Bradley, John M. Readability of secondary remedial high interest readers. *Journal of Reading*, October 1978, *22*, 8-9.

Evaluates the readability of eleven secondary level remedial reading books from three published series by means of the Fry Readability Formula. All possible 100-word samples in all of the books, except poems and plays, were analyzed. Most of the books varied in difficulty from six to nine grade levels; some content in all books exceeded their grade designations. Ranges of readability values for specific stories within three books are included in the report.

Johnson, R. K. Readability. *The School Science Review,* March 1979, *60,* 562-568.

Applies the Gunning Readability Test, Fry Readability Graph, and McLaughlin Readability Tests and averages the results to find the reading ages of examination papers in Great Britain and of eight topics in physics textbooks. Most of the physics textbooks required higher reading ages than the examination papers taken at the end of the course. The values obtained were considered to be minimal ones since all numerical parts of the sentences were ignored. The reading ages of the examination papers ranged from 12½ to 16½; of the physics textbooks, 13 to 18½.

Abbass, Mazin. The vocabulary of application forms. *Reading Improvement,* Spring 1979, *16,* 28-31.

Evaluates the vocabulary and readability of fifty commonly used application forms. The words on these forms were entered into a computer and ranked according to their frequency. The Forcast readability formula was applied to each form. The total number of words on all forms was 22, 016 with 2,923 being different words. The 100 most frequently occurring words made up approximately one-half of all words used. The readability grade levels ranged from 16.6 for a water and sewerage application to a low of 8.0 for the Social Security Number Application. The majority of the forms required a reading level between grades 10 and 11.

Hartley, James; Burnhill, Peter; & Davis, Lindsey. The effects of line length and paragraph denotation on the retrieval of information from prose text. *Visible Language,* Spring 1978, *12,* 183-194.

Assesses the readability of one and two columns of print with the beginning of new paragraphs denoted on one of four ways. Approximately 500 Grade 6 and 7 pupils with a wide range of ability were randomly assigned into one of eight conditions. For the first ten minutes they read the selection and marked the place where they were reading. For the next ten minutes they scanned the passage to supply missing words in phrases extracted from the selection and given to them. Data from the scanning measure showed that, in terms of cost effectiveness, a two-column layout with traditional paragraphing is preferable for the setting of prose. However, the line length of 42 ems in the single columns did not cause difficulty.

Luiten, John; Ames, Wilber; & Bradley, John. Using Fry's graph to describe the variation of readability: a corrected procedure. *Reading World,* May 1979, *18,* 361-367.

Tests the McCuaig and Hutchings' procedure for assessing the variation of internal readability within books through the use of the Fry formula. The number of samples ranged from ninety-one to 843 in the sixteen books analyzed. Through the use of obtained means and standard deviations several different-sized zones were established. All samples were plotted on the Fry Graph to determine the percentages of the text falling into different zones. The McCuaig and Hutchings' procedure did not yield an accurate assessment of internal variation in book readability; the inaccuracy was due to consistent overestimates of the percentage of the text found in any zone. A modification to the foregoing method is proposed.

III-4 Reading interests, preferences, and habits

GUTHRIE, JOHN T. Why people (say they) read. *The Reading Teacher,* March 1979, *32,* 752-755.

Compares a recent study of reading activities to one published in 1942. Similarities and differences in peoples' responses are explored. The two most important reasons given in the studies remained the same over time: general knowledge and relaxation/enjoyment. Questions are raised relative to interpretation of the finds.

MANN, MARGARET. *The reading habits of adults: a select annotated bibliography.* (British National Bibliography Research Fund Report No. 1) London: The British Library, 1977.

Compiles and annotates selected references on reading habits. The materials are categorized into nine groups.

RUPLEY, WILLIAM H., & GWINN, PAULA B. Reading in the real world. *Reading World,* December 1978, *18,* 117-122.

Argues that reading should be considered an essential component of every individual's life. Cites some research on the development of literacy.

ANDERS, PATRICIA L., & CARDELL, DOUGLAS. Self-perceptions and reading habits of adolescents, college students, and adults. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978. 202-205.

Examines and compares the reading behaviors of 199 adults, 176 college students, and 199 junior high school students in Tucson according to their self-perceived reading abilities, their self-reported reading habits, and their ability to answer questions on a reading retention measure. All subjects answered the same questions by telephone or dittoed handout. Library usage and reading retention were similar for all groups. No significant differences were found between the adults and college students with regard to newspaper readership, but the adult population read the newspaper significantly more than junior high school students did. It was concluded that people appeared to be reading more than had been previously thought.

HOOPER, ANN C. Reading interests in French of college students. *The French Review,* October 1976, *50,* 71-78.

Investigates through questionnaires preferences for French reading materials of 438 students enrolled in elementary French classes in five Southern universities. Included on the questionnaire were thirty items representing five reading interest areas: French literature—traditional; French literature—modern; French culture, civilization, history, and biography; popular adventure fiction; non-literary topics. An average of the item scores, representing degrees of preference, was computed. A great diversity in reading interests was displayed. The highest scoring item was *Paris—Match;* the highest categories were French literature—traditional and popular adventure fiction. Humanities majors had higher interest scores than science majors; females had higher preference scores than males. A general similarity in types least preferred was observed.

KLING, MARTIN, & TIVENAN, BONNIE. Reading activities of black adult education students. *Adult Education,* Spring 1978, *28,* 156-164.

Describes the reading activities of twenty-six adult Black high school equivalency students, ranging in ages from 17 to 59 years. In interviews the subjects answered questions concerning their reading on the previous day: time spent in reading, importance of materials read, any difficulties in their reading. The subjects averaged eighty-two minutes per day reading outside of school; but there was great variability in the time spent, with a range of no time to more than four hours. The most frequently mentioned activities were reading newspapers and mail; almost everything read was considered important.

CRANDALL, RICK, & THOMPSON, RICHARD W. The social meaning of leisure in Uganda and America. *Journal of Cross-Cultural Psychology,* December 1978, *9,* 469-481.

Collects data from 108 college students in Uganda and 119 college students in America concerning their preferences among twenty-one leisure activities. The subjects rated each activity on a 7-point scale and indicated the percentage of time they engaged in each activity. Americans significantly preferred 10 activities more than Ugandans while Ugandans rated four activities (including reading and television) significantly higher than Americans did. Interpretations of the preferences and time spent in each activity for both groups are discussed.

NUNN, CLYDE Z. Readership and coverage of science and technology in newspapers. *Journalism Quarterly,* Spring 1979, *56,* 27-30.

Uses data from 1971 and 1977 surveys by Newspaper Advertising Bureau to compare the public's interest in science and technology and the coverage of these topics by newspapers. In 1971, 1,714 adults were interviewed; in 1977, 3,048. Subjects reporting reading yesterday a newspaper shown to them by the interviewer were taken through six spreads to determine what they recalled reading or seeing. In the 1977 interviews they also described how interested they were in specified items. In 1977, science articles were considered the most interesting; interest had increased in science, technology, science-related categories of energy, public health, and environment. In spite of the increased interest in science, the topic was among the categories with the smallest percentage of editorial comment in newspapers.

HARRIS, LOUIS. Press underplay news, overdoes sports: readers. *Editor & Publisher,* January 21, 1978, 33.

Reports the finds of a Harris Survey of a national cross section of 1,533 adults, eighty-six editors and news directors, and seventy-seven reporters and writers in the United States and which was concerned about the newspaper content interests of readers. The journalists underestimated the interests of readers in hard news and overestimated their interests in sports news. The public was more interested in state news, energy, international news, politics, science, and business/finance than the journalists estimated. The estimates of the news personnel were more accurate concerning the readers' interest in local, food, entertainment, and fashion news.

SISKIND, THERESA G. The effect of newspaper design on reader preferences. *Journalism Quarterly,* Spring 1979, *56,* 54-61.

Tests the preferences of eighty-four subjects for four types of newspaper design: traditional, contemporary, well-designed traditional, and well-designed contemporary. Subjects saw slides of each kind of design and responded to each on a 9-point 20-item semantic differential scale. Content was controlled as tightly as possible. A general preference for each newspaper design was determined by summing all scales for each design. The subjects preferred designs in the following order: contemporary, well-designed; contemporary, average design; traditional, well-designed; traditional design. The subjects also rated the designs in the same order for informative-uninformative and boring-interesting.

VERNON, MCCAY, & HERING, JACKIE. Editorial: readers respond. *American Annals of the Deaf,* June 1978, *123,* 428-429.

Distributes surveys to 200 randomly selected subscribers to the *Annals* to determine their preferences of the content of the journal. The three-fourths responding preferred, in the following order, articles on a practical level about teaching; Comments, Questions, and Answers (a column); and research articles. The respondents felt that articles on the firsthand experiences of deaf people and parents of deaf children were the greatest need in the journal. Most *Annals* readers are teachers (63 percent) and administrators (23 percent) in educational programs for the deaf. Eighty percent of the subscribers read parts of each issue.

ABRAMS, MARK. Time and the elderly. *New Society,* December 21/28, 1978, *46,* 685-686.

Surveys 1,650 men and women age 65 and above to ascertain how the older British spend their time. Among the activities reported were radio listening (averaging 1½ hours), reading (1½ hours), resting (2 hours), and televiewing (3 hours). Many individual differences were found, especially among the different social classes and among the former occupations and professions.

III-5 Readership

Americans read, & use libraries, says Gallup. *Library Journal,* December 1978, *103*(22), 2465-2466.

Interviews 1,515 American adults concerning their reading habits. Fifty-nine percent read a book in the past month and 77 percent in the past year; 51 percent had visited a library. The "heavy" reader (twenty-one or more books a year) is characteristically female, age 18-34, and has attended college. The "nonreader" is usually male, over 35, with high school or less education. The "heavy" library user is usually male, aged 18-34, college educated. Those less likely to use the library are predominantly male, over 50, with a high school education or less. One-half or slightly more stated that the last book they read was a paperback or a novel. Six percent had never read a book. Reading a book because of something they had seen on television was reported by 28 percent, but 43 percent thought they would have read more if they had watched TV less.

Book industry study finds U.S. still is a nation of readers. *Library Journal,* December 1978, *103*(22), 2466.

Interviews 1,450 statistically selected readers and nonreaders in 165 United States cities concerned with their reading, book buying habits, and motivations. During the six months preceding May, 1978, 94 percent had read books, magazines, or newspapers; 55 percent had read at least one book. All read for general knowledge, but the pleasure motivation of book readers is not shared by those who read only newspapers or magazines. The majority of book readers are women, high school graduates or less, and white. Of the 750 titles given for the last book read, approximately one-fourth were best sellers. Biographies were the most popular nonfiction type and were mentioned about twice as often as self-help books.

Newspapers in search of readers. *New Society,* February 15, 1979, *47,* 362.

Questions who the readers of United Kingdom newspapers are at the present time when the overall trend is lowered newspaper circulation. The results of the survey showed that men read newspapers more than women do; that social class, education, and age are determinants of which newspapers are read; and that the national newspapers from London still dominate the field. Sales of quality papers have held up better than those of popular newspapers.

SATARIANO, WILLIAM A. Journal use in sociology: citation analysis versus readership patterns. *Library Quarterly*, July 1978, *48*, 293-300.

Examines the relationship between citation patterns of social science journals with readership patterns of a stratified random sample of 526 sociologists who recorded the social science journals they read regularly. The journals were ranked for frequency and compared to a list of most frequently cited journals previously prepared by another researcher. Of the fifty-nine journals regularly read, the most often listed were those with the highest prestige, as *American Sociological Review, American Sociologist*, and *American Journal of Sociology*. Although some overlap was found between citation and readership patterns, the citation patterns reflect a cross-disciplinary focus not found in the readership list.

Study isolates factors affecting readership, *Editor and Publisher*, March 25, 1978, 17.

Reports results of a study on five factors affecting newspaper circulation.

Study shows non-readers not turned off by content. *Editor and Publisher*, February 18, 1978, 40-41.

Cites subjects' evaluations of non-advertising content in weekday papers. Over one-half of the 109,331 items in "yesterday's" paper were rated as interesting, and almost half were personally important to the raters. When major newspaper stories were compared with news stories reported on television, TV network news was oriented toward international and domestic politics and government news with more diversity being found in newspapers. The most popular topics dealt with everyday living programs. Blacks rank below whites in newspaper readership but view television newscasts as often as whites. Low newspaper readership was found among those under 50.

III-6 Library use

CARPENTER, RAY L. The public library patron. *Library Journal*, February 1, 1979, *104*, 347-351.

Interviews 1,008 adults in North Carolina, 24 percent (243) being users of libraries who were compared with the 765 non-users on a number of variables. The library user population was found largely to be young, white, relatively well-to-do financially, educated, female. They took a positive and active approach to politics and read newspapers, including editorials. For both groups television is the primary source of information about public affairs, except for local happenings when the newspaper and radio are superior to television. Magazines are more important than radio for users but not non-users of libraries.

KISTER, KEN. Encyclopedias and the public library: a national survey. *Library Journal*, April 15, 1979, *104*, 890-893.

Surveys seventy-seven United States libraries for the opinions of librarians concerning the use and effectiveness of English-language encylopedias. Of the thirty-seven general encyclopedias, *Word Book Encyclopedia* was named the most effective encyclopedia by an overwhelming majority, followed by, in this order, *Encyclopedia Americana, Collier's Encyclopedia, New Encyclopaedia Britannica*. Of the small-volume adult encyclopedias, *New Columbia* was followed by *Lincoln Library* and *Random House*. *World Book* was rated most effective for young adults and *New Book of Knowledge* for children. The librarians also expressed attitudes towards school policies which discourage use of encyclopedias and giving advice about the purchasing of encyclopedias by families. Comments from librarians about the questions they were asked are included.

CASSATA, MARY B. Profiles of the users and usages of Afro-American literature: a unification of communications and library research strategies. *Journal of Black Studies,* September 1978, *9,* 45-66.

Describes different levels of users of Afro-American materials, the usage they made of these materials, some of the effects derived from the study of this literature, and barriers that interfered with the use of these resources. The writer analyzed in depth a Black elementary school library; a large urban public library, including a branch library having a strong Black literature collection; a public library having a major research collection; and a Black university library. The importance of the librarian's knowing the clientele and promoting a cooperative relationship with other libraries was stressed.

WRIGHT, SYLVIA HART. Patterns of library use in a remedial pre-college program. *The Journal of Negro Education,* Fall 1978, *47,* 385-394.

Analyzes, after the library was dismantled, the use made of a small library which served high school graduates from city low income areas. Its users were 60 percent Black, 30 percent Hispanic, and 10 percent other. Every fifth book in the classified collection was analyzed for usage or loss. Books centering on Black (Third World Studies) were checked out almost twice as often as all other books. The circulation rates of these books were high when they were concentrated in one place in the library. Black/Third World books on American history were 11.5 times as popular as all other books on the subject. Books on contemporary social problems, not explicitly ethnic-related, were also popular.

RAY, JEAN M. Who borrows maps from a university library map collection--and why? Report II. *Special Libraries,* January 1978, *69,* 13-20.

Analyzes circulation records of maps for 1972-73 and 1974-75 in a state Illinois university as to department affiliation and academic status of borrowers, stated purpose for checking out maps, and area and form of items borrowed. The findings revealed a widespread distribution of map borrowers throughout the university with heaviest use by graduate students for research purposes. The geographical emphasis was on the local area with aerial photos and topographic maps the most popular types. While borrowers are concentrated in certain departments in the sciences and social sciences, they do not include all personnel in these areas and are found in over fifty other university units.

GOEHLERT, ROBERT. Periodical use in an academic library: a study of economists and political scientists. *Special Libraries,* February 1978, *69,* 51-60.

Employs a document delivery service for a Midwest university faculty in economics and political science to generate data for an analysis of journal use.

The library service included the delivery of books and copies of periodical articles; faculty members submitted a list of up to fifteen journals for which they would like to receive the tables of contents. Data were recorded on individual requests during a 32-month period. Articles were requested from 620 journals and newspapers; nine journal titles accounted for 20.2 percent of the requests and forty-three titles for 50.3 percent. Tables are included for the first 100 journals and for journals used by economists and political scientists. The study also examined the half-life of journals, the correlation between the most cited and most used journals, private subscriptions, the effect of a selective dissemination of information service on journal use.

HARRIS, N. D. C., & KIRKHOPE, S. M. Uses of, and students' reactions to, study packs as self-instructional material in the library. *Programmed Learning and Educational Technology,* November 1978, *15,* 262-270.

Investigates the uses and purposes of and reactions to the study packs in a university library in England. The methods of investigation were observation, questionnaires, free response, and interviews, individually and in groups, with more than 150 students. During the academic year of 1976-77, 1,457 different study packs were placed in the library by eighty-six lecturers. Packs were used, according to the students, for essays/assignments, seminar/discussions, essential reading, revision/examinations, and note taking. Purposes for the packs included the easing of book shortages, crystallizing issues, and providing information not in books. Inadequate loan periods, length, and insufficient copies of the packs were the principal concerns of the users.

ALABI, G. Statistical analysis of journal usage. *International Library Journal,* January 1979, *11,* 141-150.

Compares journal usage at the Ibadan University Library (Nigeria) with Bradford's law of distribution. Request slips were used as the data base. A total of 205 periodical titles circulated 620 times in May, 1976; 163 circulated 609 times in May, 1977; 202 users consulted journals 646 times during the peak period of 1977. Both the journal circulation distribution and the users' analysis conform to the law of distribution, however, the results of a correlation of the two periods showed that journal circulation at peak periods may not be a valid measurement of determining which journals a library should retain.

WEIL, S. Survey on the use and cost of scientific journals in the Soreq library. *Special Libraries,* April 1979, *70,* 182-189.

Studies the use of journals at the Soreq Nuclear Research Center Library, Israel, to determine which journals received low use and could be discontinued and whether the allocation of the library budget to journal subscriptions was justified. The data on the use of journals during the 3-month survey period in 1977 were collected by having 125 library users indicate which journals they used and thought should be reordered, asking users of current issues to sign slips and not to reshelve periodicals, and by recording requests for photocopies and interlibrary loans. Uses were tablulated for each journal. It was concluded that the journal collection was being fully used and that the allocation for journals was justified. Criteria were established for qualifications of journals for a core collection.

BANK, H. Information management: survey of readership in public patent libraries. *Special Libraries,* April 1979, *70,* 190-194.

Uses a questionnaire with the users of patent collections in thirty-one libraries in Belgium, Denmark, France, West Germany, Ireland, Italy, the Netherlands, and the United Kingdom to determine who and how many use the libraries, their purposes and satisfaction. The majority of the users come from the locality where the library was situated and use the libraries chiefly for legal purposes. They came from three main fields of employment: patents, science and technology, and others. Diversity in the organization and use of the libraries in the different countries was noted. The most criticized aspect was concerned with the availability of the documents.

III-7 Role and development of libraries

AARON, SHIRLEY L. Combined school public library programs: an abstract of a national study. *School Media Quarterly,* Fall 1978, *7,* 31-32 & 49-53.

Investigates the concept of combined school and public libraries to determine which institutional structures have the most potential for improving library services in one Southern state. The year-long study consisted of three phases, the first being the central focus of this report. Selected sites in the United States and Canada were visited to identify factors that resulted in the success or failure of combined programs. An evaluation instrument, divided into sixteen sections, was developed and used. It was concluded that a community supporting two sources will not offer better services through a combined program and that the combined program is a possible alternative when services are limited or non-existent. There is, however, no evidence that the combined program is more economical.

MCCARTHY, CAVAN. Medical libraries in developing countries: an international approach. *International Library Review,* October 1978, *10,* 435-446.

Examines the status and effects of the lack of development of countries on medical libraries. Problems noted especially in developing countries are lack of respect for the profession of librarians, lack or inappropriate training of librarians, inability to obtain kinds of collections appropriate for each country, delay in the receipt of materials and difficulties in making payments, small size of library collections, lack of equipment, and lack of cooperative services, such as translating of materials. One solution suggested is the formation of network center libraries similar to one in operation in Brazil to serve a number of centers.

SANDHU, R. K., & SANDHU, H. S. Villages with and without libraries in India. *International Library Review,* April 1979, *11,* 269-276.

Compares the characteristics of ninety-eight villages in India with and without libraries. Information was gained through interviews conducted by assistant agricultural inspectors and block development officers; the questions asked were concerned with village characteristics. Weights were assigned to different answers, with combined weights forming indexes for educational, commercial, and communication developments; organizational help (governmental and non-governmental sources); and farming modernization. When the two sets of villages were compared, it was found that libraries that were located in villages where all of the conditions studied were more advanced.

FERGUSON, ANTHONY W. Taiwan college and university libraries: problems and prospects. *International Library Review,* October 1978, *10,* 397-405.

Surveys status of Taiwan's 23 major college and university libraries during 1975-76. The major problems faced by these libraries stem from inadequate funding and include lack of trained librarians and leadership, lack of job openings for professionals, inadequate book collections, and overabundance of departmental libraries. Other problems noted were wasteful acquisition procedures, lack of status for both librarians and libraries, and relatives and friends hired as librarians by administrators. Included in the report is a table in which the universities, numbers of teachers and students, total volumes, and number of books are given. Only one meets minimum standards promoted by the Republic of China Library Association.

III-8 Social and cultural influences on reading

SAWYER, DIANE J. A profile of children in compensatory reading programs. In Robert C. Calfee & Priscilla A. Drum (Eds.) *Teaching reading in compensatory classes.* Newark, Delaware: International Reading Association, 1979. 40-53 & 187-191.

Describes procedures for the selection of students for compensatory reading instruction, their characteristics, and their family background. The data were collected by the Educational Testing Service in its study of compensatory reading programs in the United States. Students were selected primarily on the basis of low reading test scores and teacher recommendation. They were diverse in cultural and ethnic backgrounds, socioeconomic level, and family occupations. Children from disadvantaged homes comprised between one-fourth and one-third of the membership in the classes; three out of five students were boys. Psychological and sociological problems associated with home background were more frequently cited at all grade levels than physiological ones.

ALLINGTON, RICHARD L. Communities and schools. In Robert C. Calfee & Priscilla A. Drum (Eds.) *Teaching reading in compensatory classes.* Newark, Delaware: International Reading Association, 1979, 19-39 & 187-191.

Describes communities and schools in which compensatory reading instruction was implemented, the data coming from the Educational Testing Service study of compensatory education. Community characteristics (community type, geographical region), school characteristics, and the relations between school and community are explored. Schools with compensatory programs serve communities with generally less advantaged families. In 1972, the time of this survey, the racial-ethnic composition of schools showed considerable evidence of imbalance, with heavy concentration of minority groups in certain schools. The larger schools were found in urban neighborhoods and tended to have lower achievement scores on the average. Both principals and teachers were generally satisfied with their colleagues and working conditions.

Schellenberg, James, & Halteman, John. Bussing and academic achievement: a two-year follow-up. *Urban Education,* January 1976, *10,* 357-365.

Investigates the effects of bussing upon achievement in reading and mathematics in a Michigan school system. Sixty-eight pairs of subjects, half being bussed and the other half not being bussed, were matched on the following: same elementary school area of the inner city; sex, race, grade level with similar scores on a standardized achievement test. The results, covering a period of two years, showed no statistically significant differences between bussed and control groups for either reading or mathematics.

O'Rourke, William J. Are parents an influence on adolescent reading habits? *Journal of Reading,* January 1979, *22,* 340-343.

Investigates the relationship of the reading habits of parents and those of their junior high school students. A sample of 150 student-parent pairs responded to a quantitative inventory of reading experiences. The Pearson product moment correlation coefficient was used on the ten categories and the total scores to determine relationships. Statistically significant relationships between parent and student reading habits were found for three of the ten categories: use of libraries, mechanics of reading, use of books. Parents scored significantly higher on the inventory than their children, a situation which showed the two groups were displaying different reading habits.

Moon, Cliff, & Wells, Gordon. The influence of home on learning to read. *Journal of Research in Reading,* February 1979, *2,* 53-62.

Investigates the relationship of children's intrinsic interest in literacy and parental interest in and promotion of literacy with early achievement in reading within the context of the Bristol Longitudinal Language Development Research Programme. Data were derived for twenty children from three sources: interviews with parents when the children were 5 and 7 years old, regular recordings of spontaneous conversation of the children in their homes between 3½ and 5 years; assessments of reading at 5 and 7 years. The child's intrinsic interest in literacy was not related to later success in reading, but parental interest in literacy correlated highly with all test and teacher assessments of the child's reading ability.

Ryan, John. Family patterns of reading problems: the family that reads together... In Malcolm P. Douglass (Ed.) All things considered... Reading, the process of creating meaning for sensed stimuli. *Claremont Reading Conference 41st Yearbook,* 1977, 159-163.

Administers a 45-item questionnaire to 109 freshman university students and to as many members of their extended families as possible over the Thanksgiving vacation. The results were compared for the regular group of fifty-four students taking the regular freshman composition courses and the intensive group of fifty-five students who received intense instruction in composition and reading. Home interviews were also conducted with fifteen families from each group of subjects. The mean on the questionnaire for the regular group was significantly higher than that for the intensive group. The regular group exceeded the intensive group in parents' reading to their children when young, the amount read by parents, the number of books in the home, and interest in reading in the home. Fewer parents in the regular group had trouble with reading.

Auer, Michael; Lahr, Donald; & Docter, Robert. Social and institutional factors in reading achievement in elementary schools. *Educational Research Quarterly,* Spring 1978, *3,* 3-18.

Examines the relationship between reading achievement in 435 elementary schools in a southern California city during 1970-71 and 11 variables, classified into three categories: school characteristics, student characteristics, and neighborhood characteristics. Data were collected for each school and were analyzed by Pearson product-moment correlation and multiple regressions equations. From the correlation data generally stronger relationships were found between neighborhood and student variables and achievement scores than between school variables and achievement scores. Ethnicity had the highest correlation with achievement at all levels. The results from the multiple regression analysis showed that ethnicity, income, turnover, money spent per pupil, and education independently predicted reading achievement and were significantly related to reading test scores. Neither tenure nor salary of teachers had a significant relationship at any grade level.

Heerman, Charles E., & Callison, Patricia R. Reading profile of a small mid-western school. *Reading Improvement,* Summer 1978, *15,* 101-104.

Prepares a reading profile of a small Midwestern school, K-12, which reflected the frequency of reading and televiewing. Students in K-8 kept records on how they utilized their time; their parents reported upon their perceptions of their children's use of time. Students, 9-12, responded to a questionnaire. In K-3 there were relatively modest levels of reading and TV watching with a significant increase in both in grades 4-6. Both declined in grades 7-8 but increased for grades 9-12. Parents were satisfied with their K-3 children's reading, but the satisfaction declined for pupils in the middle grades.

DOWNING, JOHN; DWYER, CAROL A.; FEITELSON, DINA; JANSEN, MOGENS; KEMPPAINEN, RITVA; MATIHALDI, HILKKA-LIISA; REGGI, DAVID R.; SAKAMOTO, TAKAHIKO; TAYLOR, HUGH; THACKRAY, DEREK V.; & THOMSON, DOUGLAS. A cross-national survey of cultural expectations and sex-role standards in reading. *Journal of Research in Reading,* February 1979, *2,* 8-23.

Investigates cultural expectations and sex-role standards about reading in Canada, Denmark, England, Finland, Israel, Japan, and the United States. A picture test showing different activities and objects including reading and books was administered in each country to six sub-samples which approximated the following levels: students in Grades I, IV, VIII, and XII, college students, and adults. Subjects in a forced-choice situation ascribed the object or activity as being appropriate for boys or for girls. Responses from males and females were analyzed separately. Female subjects in all seven countries at all six levels gave a majority of "girl" responses. Some differences in the patterns of different countries were noted, however. Denmark and Japan differed with the other countries in that they consistently viewed reading as acceptable masculine activity. In most countries the proportion of girl responses by male subjects increased as the levels increased except in Japan and Denmark.

MOKROS, JANICE R., & KOFF, ELISSA. Sex-stereotyping of children's success in mathematics and reading. *Psychological Reports,* June 1978, *42,* 1287-1293.

Investigates sixty fifth and fifty-seven sixth graders' evaluations of the social attractiveness of boys and girls described as highly successful in either reading or mathematics. Approximately even numbers of boys and girls were the subjects who attended three elementary schools in a Boston suburb. They read one of four possible stories in which either a girl or a boy was described as the best reading or mathematics student in the class and answered questions on a questionnaire. A rating scale was used to determine the extent to which subjects thought that a boy, girl, good friend, and teacher like these fictitious characters. Both sexes generally gave higher ratings to the boy who did well in mathematics and the girl who did well in reading.

GRANT, GRACE E., & TIERNEY, DENNIS. Perspectives for multi-cultural education: uses of popular culture in the classroom. In Malcolm P. Douglass (Ed.) All things considered... Reading, the process of creating meaning for sensed stimuli. *Claremont Reading Conference 41st Yearbook,* 1977. 140-147.

Evaluates two studies of a 12-week social studies elective course which included contributions of different ethnic and cultural groups. The curriculum developed in an Illinois high school for eleventh and twelfth grade students included the topics of music—1890s to today; pulp literature; popular literature; radio; television; fads, fashions, and follies. Pre- and post-tests were administered to measure overall improvement of students and their understanding of music, radio/television, and social values. The results revealed a significant increase in the ability to describe, analyze, and interpret sensed stimuli, especially in social values.

McPHAIL, IRVING P. A study of response to literature across three social interaction patterns: a directional effort. *Reading Improvement,* Spring 1979, *16,* 55-61.

Investigates verbal behavior of five third-grade children representing three cultural groups in ten sessions over a period of five weeks. Materials for reading and discussion included Level 3 of *Communicating Series,* children's books supplied by the subjects, and personal experiences. The last seven sessions were devoted to group interaction across three interaction patterns: adult-dominated, peer-dominated, and adult-balanced. One conclusion of importance here was that no particular type of linguistic structure is specially suited to any particular type of culture and no cultural group is better able to handle the language experiences of the materials used than any other.

LORTON, MARY, & KUKUK, CHRISTOPHER. Social process variables affecting reading performance in delayed readers. *Reading Improvement,* Fall 1978, *15,* 175-179.

Investigates the relationship between fourteen social process variables (grouped under four categories: perinatal events, early language, parental/home environment, child behavior) and reading performance (word recognition in isolation, word recognition in context, oral comprehension, spelling). The subjects were ninety children and adolescents randomly selected from 750 clinical case studies. Reading behavior was determined by a reading inventory; social data were collected from parent information questionnaires and interviews. In each of a series of multiple regression analyses the two best predictors of reading achievement were birth trauma and being held back in school.

HASHWAY, ROBERT M., & NUTTALL, RONALD L. A relative importance ordering of education competencies in a multidimensional space. *Educational Research Quarterly,* Fall 1977, *2,* 3-12.

Describes the results of a survey of adults' opinions concerning competencies high school students should be taught. On a questionnaire with thirty-four questions 319 subjects rated the importance of given skills being taught in high schools on a 7-point scale. Seven factors, accounting for 65 percent of the total variance emerged from factor analysis. The subjects indicated that it was important for the schools to teach basic academic skills; certain practical skills; the ability to function in social, bureaucratic, and job situations; and a sense of respect for law and authority.

III-9 Literacy

RESNICK, DANIEL P., & RESNICK, LAUREN B. The nature of literacy: an historical exploration. Harvard Educational Review, August 1977, *47,* 370-385.

Presents an historical examination of European and American approaches to literacy. Three major historical models for literacy development before the twentieth century were emphasized: the Protestant-religious, the elite-technical, and the civic-national. Literacy training in seventeeth-century Sweden, elite scientific and technical education in France since the eighteenth century, schooling among the French peasants during the last century, and literacy in the first part of this century in the United States were described. It was concluded that reading instruction has been aimed at attaining a low level of literacy for a large number of people or a high level for an elite and that pedagogical practices from the past offer little remedy for current reading problems.

MACK, FAITE ROYJIER-PONCEFONTE. The illiteracy concept: defining the critical level. *Reading Horizons,* Fall 1978, *19,* 53-60.

Examines estimates of the extent of illiteracy in the United States and discusses various definitions of literacy.

STICHT, THOMAS G. The development of literacy. *Curriculum Inquiry,* Winter 1978, *8,* 341-351.

Suggests a macro-model of the development of literacy. Addresses a previous research review by showing how the cited research can be subsumed in the macro-model.

STICHT, THOMAS G. *Literacy and vocational competence.* Occasional paper No. 39. Columbus, Ohio: The National Center for Research in Vocational Education, April 1978.

Reviews recent research concerning the relationship of literacy to competency in different vocations, differences in performance in auding and in reading, the nature of job reading tasks, and the identification of reading demands for different vocations. A model of the development of literacy skills and suggestions for a reading task inventory are also presented.

ABHARI, J. A. Easy-to-read materials for adult semiliterates: an international survey. In Dina Feitelson (Ed.) *Cross-cultural perspectives on reading and reading research.* Newark, Delaware: International Reading Association, 1978. 174-182.

Presents the results of an international survey of ninety-five publishers of easy-to-read materials. The main objectives of the materials have been the development and growth of reading skills and habits, family life education, and entertainment. Among the findings of the survey: publication of easy-to-read materials has not been a lucrative business. These materials have been written in 148 languages; they are mainly in book form and cover such topics as occupational skills, general information, fiction, and family-life-education. Finding well-trained writers has been the most serious problem encountered.

HOPKINS, H. R. Bruce: a case study in beginning reading at the adult level. *Reading Education,* Autumn 1977, *2,* 63-67.

Explains in a case study the procedures used to help an adult who had been labeled a dyslexic. The subject became a school dropout, joined the crew of a tuna boat, traveled abroad, and wanted to read more than he wanted to do anything else. By means of the language experience approach, the subject dictated stories about his experiences on the tuna boat, developed a sight vocabulary, and learned to read.

HOWATT, A. P. R. An adult literacy project in Strathclyde, Scotland. *Journal of Research in Reading,* September 1978, *1,* 121-127.

Interviews 474 adult literacy students in Scotland during 1976-77 concerning their characteristics and attainments. The results showed two distinct groups with differing needs: those whose skills had not prevented them from obtaining employment but who needed to improve their skills, and those whose low school achievement was due to environment and limited learning capacities. Work was begun on an attainment scale which was based upon scaling rather than testing techniques.

WESOOWSKA, EUGENIA ANNA. The role of adult functional literacy in Poland. *Literacy Discussion,* Summer 1977, *8,* 25-46.

Traces the development of literacy in Poland from the nineteenth century when the first primers and other reading materials for adults appeared. The problem of illiteracy was relieved between 1945 and 1948 through the work of educators and voluntary educational associations followed by literacy education provided by the government in state-run classes. The current literacy program is wider in scope than the earlier one and includes fundamental activities which contribute to socioeconomic and cultural endeavors. Literacy programs have been expanded beyond the primary level and include both general and vocational education. Plans have been made to extend the program to evening and extramural classes as well as television and radio programs for rural communities.

SCRIBNER, SYLVIA, & COLE, MICHAEL. Literacy without schooling: testing for intellectual effects. *Harvard Educational Review,* November 1978, *48,* 448-461.

Investigates the effects of becoming literate separately from the effects of attending school among the Vai of Liberia, people who invented a syllabic writing system to represent their own language. A variety of tasks in a test battery was given to more than 700 Vai adults to determine if cognitive development that was improved by education would be influenced by Vai literacy in a similar way. Literacy in the Vai script did not substitute for schooling. The results from a more practical game approach showed that certain literacy practices produced intellectual outcomes. Literacy in Vai script was not associated with generalizing competencies, such as abstraction or verbal reasoning.

MUSTAFFA-KEDAH, OMAR. The development and situation of illiteracy in the Arab states. *Literacy Discussion*, Autumn 1977, *8*, 5-30 & Appendices i-iv.

Reports the results of surveys conducted in thirteen Arab countries concerning the status of adult literacy and describes the background of the Arab literacy campaigns, including the three Alexandria Conferences for Literacy held between 1964 and 1976. In 1970 the Arab illiteracy rate was estimated at 73 percent; in 1973-74, 42 percent. Two causes of illiteracy were identified as lack of compulsory primary education and numerous drop outs. Problems encountered in the training include irregular student attendance, student unawareness of their problems or the gravity of situation, and lack of qualified instructors, scientific planning, adequate budget, and instructional materials.

The Third Alexandria Conference. Eradication of illiteracy: the Arab strategy. *Literacy Discussion*, Autumn 1977, *8*, 31-52.

Proposes a 4-part strategy to eradicate illiteracy in Arab countries: analysis of the present status of illiteracy, statement of objectives, review of basic principles, and proposed procedures. Past efforts to combat illiteracy had failed, both in quantity and quality. Almost one-third of Arab children of primary school age are not enrolled in schools; large numbers of older children become dropouts. Three stages for carrying out the objectives included preparation, implementation, and liquidation periods. The cultural aspects of literacy as well as the educational ones were recognized. Unification of all sectors of Arab nations will be required for the development of the proposed plan.

AHMED, SA'IB AMIN (Translator). State of literacy following the progessive revolution of 1968 Republic of Iraq. *Literacy Discussion*, Autumn 1977, *8*, 53-78.

Traces the development of literacy projects in Iraq since 1922. World War II curtailed earlier campaigns with little or no action occurring in the 1950s. Governmental conferences were held in the 70s during which time plans were made for the eradication of illiteracy among men by 1985 and among women by 1990. Currently, 49.9 percent of the population (ages 15-44) is illiterate. Literacy centers have been established; links with the school system have been made; materials have been developed. The objectives of the campaign are classified as rudimentary, political, social, economic and health. Literacy work is closely connected with the government.

NICKJOO, MAHVASH. A century of struggle for the reform of the Persian script. *The Reading Teacher*, May 1979, *32*, 926-929.

Explains that the primary reason for illiteracy in Iran lies in the difficulty of reading and writing Persian script. The 1963 campaign to eradicate illiteracy included a literacy corps, high school graduates inducted into military service who received besides military training instruction in how to teach the rudiments of reading and writing to children and the elderly in the villages. The program was not considered to be successful. The arguments of an earlier reformer of Arabic script were reviewed and considered important to the lack of success of the program. Political and social influences in Iran are responsible for lack of change in the alphabet.

KOZOL, JONATHAN. A new look at the literacy campaign in Cuba. *Harvard Educational Review,* August 1978, *48,* 341-377.

Traces the history of the Cuban literacy campaign from 1960. This study was based upon interviews conducted by the investigator in Cuba and on publications not generally available. In September, 1960, before the General Assembly of the United Nations Castro announced that within a year's time Cuba would teach one million illiterate adults to read and write. Teaching was done largely by student volunteers; reading materials were especially prepared and were concerned with Cuban life and politics. When it appeared that the one year's literacy goal would not be achieved, drastic measures were established: use of factory workers, housewives, and teachers; acceleration camps, traveling teachers. Within a month's time the nation was almost entirely mobilized in the literacy effort. Accounts of two members of the campaign forces are included.

III-10 History of magazines and newspapers

SCHREINER, SAMUEL A., JR. *The condensed world of the* Reader's Digest. New York: Stein and Day, 1977.

Traces the development of the *Reader's Digest* from its founding in 1922 by DeWitt and Lila Wallace. Nearly 30 million copies monthly go to an estimated readership of 100 million people in 170 countries. The association is also one of the world's largest hardback book publishers (condensed books, special books, Reader's Digest Press). The popularity of the Digest has been due to several factors: simple, direct handling and unchanging choices of topics, excellent editing, and optimism and humor. Discussed are the cutting process of the longer original articles, the reviewing of 1,500 United States books and 600 to 800 from abroad, the research conducted in regard to articles, the preparation of foreign editions, the financial structure, and the logistics of the giant publication of the *Digest.*

SMITH, CULVER, H. *The press, politics, and patronage: the American government's use of newspapers 1789-1875.* Athens, Georgia: The University of Georgia Press, 1977.

Details the official linkage between the press and the government in the United States between 1789 and 1875. The new government turned to newspapers to publish laws, orders, and resolutions of Congress. Throughout the report the writer explains the origins of newspaper patronage, why Congress authorized the paid use of newspapers selected by the Secretary of State to inform the public about acts of Congress, and how political leaders, including Presidents, adopted certain papers as their mouthpieces. The American people regarded positively the press and considered it a public service rather than a private business. Because of the growing costs of printing government documents and of alleged illegal practices, a search for alternatives led eventually to the establishment of the Government Printing Office. Throughout this early period the press was free to criticize public officials and the government and served as its own monitor. Included are all Presidents, secretaries of state, other officials, colorful editors, hundreds of newsmen and their newspapers.

BALDASTY, GERALD J. The Charleston, South Carolina, press and national news, 1808-47. *Journalism Quarterly,* Autumn 1978, *55,* 519-526.

Questions how newspapers in the early 1800s received news when there were no electronic or national wire services to transmit news. The treatment of four issues (the embargo of 1807-08, the Missouri Compromise of 1820, the U. S. Bank recharter veto and the tariff bill of July, 1832, and the Wilmot Proviso of 1846-47) was examined in newspapers from South Carolina and Washington, D.C. The results showed that the South Carolina press depended strongly on Washington newspapers sent by mail for political information and commentary on national issues, especially upon the *National Intelligencer* during the first quarter of the century. Changes in technology and transportation and the rise of news correspondents ended the relationship of state and national presses.

ANDERS, LESLIE. Retrospect: four decades of American military journalism. *Military Affairs,* April 1977, *41,* 62-66.

Provides details of service-oriented journals published in the United States during four decades. Most of the twenty-nine early periodicals were privately sponsored but maintained relationships with one of the military components. *Military Affairs,* first appearing in 1937, was the first service-related publication to specialize in historical scholarship and became the standard publication of military history. By the time of the involvement of the United States in World War II, forty-six periodicals were oriented toward military concerns; by V-J day, over sixty. Various special-interest publications were generated during the war. Currently military historians find many doors open to them.

BARROW, LIONEL C., JR. "Our own cause:" 'Freedom's Journal' and the beginnings of the black press. *Journalism History,* Winter 1977-78, *4,* 118-122.

Describes the origin, format, contents, and readership of *Freedom's Journal,* the first newspaper published by Blacks in the United States. This paper was first published on March 16, 1827, and lasted two years. The purpose of the newspaper was to give Blacks a voice of their own and to give them an opportunity to read articles about Blacks and their accomplishments. The paper took issue with the local press at times, refuted the reasons given by advocates of colonization, ran campaigns to free slaves, held meetings with subscribers to determine the extent of their satisfaction with the content of the paper, and ran notices of interest to the Black community.

KRIELING, ALBERT. The rise of the black press in Chicago. *Journalism History*, Winter 1977-1978, *4*, 132-136, 156.

Describes Black journalism in Chicago from modest beginnings in 1874 until the late 1890s. Newspapers, usually four pages, served small but growing middle-class populations in urban Black communities. They covered the political gains and losses of Blacks nationally and protested the oppression of the Southern Blacks. Emphasis was placed upon the contents of the *Conservator* and its competitor, *Appeal.* Numerous short-lived newspapers and specialized publications appeared in the 1880s and 1890s, most being church or partisan organs.

O'KELLY, CHARLOTTE G. The black press: conservative or radical, reformist or revolutionary? *Journalism History*, Winter 1977-78, *4*, 114-116.

Cites research about the nature of the positions taken by the Black press from 1827 to the present time. Whether or not the Black press was considered conservative or radical depended upon the perspective of the investigator toward social change and the attitudes of society at the time press items were published. O'Kelly suggested that a useful approach would be considering whether the press has been reform- or revolutionary-oriented. A high degree of continuity in movement-related themes was noted over the past several decades.

DESMOND, ROBERT W. *The information process: world news reporting to the twentieth century.* Iowa City: University of Iowa Press, 1978.

Traces the development of information transmittal from its beginnings to the twentieth century. The author cites the Acta Diurna, posted regularly in the Roman Forum, as the first attempt to provide citizens of any land with current information in written form. The earliest printed publication in the world and also the publication of longest existence was the bulletin known in its later years as the *Peking Gazette*. The bulletin began about 750 A.D. as a twice a year report for the information of the emperor which appeared with a monthly official bulletin. About 1361, it became a printed weekly and in 1830, it became a daily which continued until the Chinese empire ended in 1911. News was distributed in the marketplaces and tea houses of larger cities in China and elsewhere by means of newshawkers or storytellers who presented oral reports of the news. The first news publications to be offered for sale to the general public were "broadsheets" or "flysheets" which held one item of news and were most common in the Germanic states of central Europe in the fifteenth century. Eventually newsletters developed as the best existing source of information until replaced by printed newspapers in the eighteenth century. The first titled newspaper in England was *The Courant*, or *Weekly News* that started in 1621. The first English daily, the *Daily Courant*, began in London in 1702. The author discusses the beginnings of organized news coverage and of news agencies as well as the emerging roles of the editor and reporter.

CRANFIELD, G. A. *The press and society: from Caxton to Northcliffe.* New York: Longman, 1978.

Surveys the history of the press in England beginning with the introduction of the art of printing into England in 1476 and ending with the beginning of the twentieth century. The story of the press is based on three main themes: intelligence, instruction, and entertainment. All three themes went through phases in developing. Intelligence originally meant bald accounts of events with no comment; eventually it came to mean politics. Instruction was originally designed to give gentry social polish through exposure to elegant essays; its heyday was in the nineteenth century. Entertainment was always one of the main functions of the press, but its focus changed from sixteenth century descriptions of miracles, prodigies, and wonders to an emphasis on blood and sex. The growth of reading ability among the members of the working class led to the appearance of inexpensive Sunday newspapers that emphasized amusement and entertainment rather than instruction.

BOSTON, RAY. Fleet street 100 years ago. *Journalism Studies Review,* June 1977, 16-20.

Describes the role of newspapers and the attitudes towards the price in England in 1877. The political influence of the *Northern Echo,* a small daily newspaper in the North of England, was detailed. London dailies were written for the London middle class and were written in a complex style. A comparison of British journalism to the new journalism in America was made. Rapid changes occurred in British newspapers, especially on the inside pages.

LEE, ALAN J. *The origins of the popular press 1855-1914.* Totowa, New Jersey: Rowman and Littlefield, 1976.

Traces the struggles and development of the free press in England from its emergence in the early 1860s. Although quantitative information is included, the emphasis of the book is upon opinions about the role of the press during the different time periods. Technical, economic, social, and commercial changes in England, especially in London, were largely responsible for the transformation of the press from small scale craft production to large scale industrial production; these factors, however, interfered with the attainment of the earlier liberal view of the cheap press. Emphasis is placed upon the relationship of politics to and liberal/conservative attitudes towards the free press. The rise and fall of the penny press, newspaper business, comparison of old and new journalism, examples of newspapers published in England, and a comparison of free press publications in England with those in France and the United States are among the topics discussed.

HOLLSTEIN, MILTON. The changing press of Paris. *Journalism Quarterly,* Autumn 1978, *55,* 438-444.

Delineates changes in the Parisian press since 1914. General characteristics noted were the steady decline in both numbers of newspapers published and in circulation, the rise of the regional press, and new newspapers and magazines replacing older ones. Concentration of ownership was the major trend noted. Brief case histories are given of different press publications and of their owners.

Kaplan, Frank L. The Czech and Slovak Press: the first 100 years. *Journalism Monographs,* January 1977, No. 47. Lexington, Kentucky: Association for Education in Journalism. 1-47.

Traces the evolution of Czechoslovak journalism from its emergence in 1848 during a period of political ferment to its forced change in orientation and purpose during the Communist Party's rise to power in Czechoslovakia in February, 1948. Journalism has always been an important weapon in this country's struggle against tyranny. One hundred years after its founding, many of the traditions, customs, and practices developed by the Czechoslovak press, especially freedom of expression, were eliminated; new guidelines were imposed by the Party in an effort to mold the country into a Socialist state. The history of the press during these years coincided with and reflected the history of the nation.

Walker, R. B. *The newspaper press in New South Wales, 1803-1920.* Sydney, Australia: Sydney University Press, 1976.

Describes the history of the Australian press over more than a century and includes advertising developments, specific papers, and the general social impact of papers in the time period involved. In the beginning the press was costly, exclusive in character, and had a small circulation. The government and ruling class employed the press as a means of social control. Later a laissez-faire model evolved and the number of newspapers printed grew markedly, so that by 1909 there were sixty-seven dailies in Australia. Papers of the end of the century were serious and solid in appearance and content, packed with domestic news set in small type. Editorials ran up to 1,000 words as compared with present-day editorials of 100 or 200 words. In the 1880's a trend toward making the press easy to read set in. The author contends that the trend has continued to the present day.

Scotton, James F. Tanganyika's African press, 1937-1960: a nearly forgotten pre-independence forum. *The African Studies Review,* April 1978, *21,* 1-18.

Examines the role of the African press of Tanganyika under British administration and before its self-government in 1961. Like the press in Kenya and Uganda, this particular press provided an outlet for specific African grievances, challenged accepted social and political patterns, and helped to mobilize the African people in support of proposed new patterns and their African spokesmen. One of the important newspapers of the time was *Kwetu,* which was valuable reading for British officials. After World War II when independent papers began to appear, the Tanganyika government strengthened legal controls over them. It was concluded that because the African press operated in an area where the independence struggle was carried on with very little violence, its importance has been underestimated.

III-11 Newspaper and magazine publication

Singletary, Michael W., & Cowling, Marianne. Letters to the editor of the non-daily press. *Journalism Quarterly,* Spring 1979, *56,* 165-168.

Focuses on characteristics of writers of letters to the editor of the non-daily press during a 6-weeks period. Questionnaires were completed by eighty-four writers to twenty-five non-daily Pennsylvania newspapers. Most of these writers wrote letters to only one newspaper, had all of their letters published with few editorial changes, thought the papers published all letters received, had attended college, and were males. They wrote on topics that were classified in thirty-nine categories, ranged in ages from 20 to over 60, and represented nine professional categories.

Hynds, Ernest C., & Kibler, Dan. Survey reveals trends in coverage of sports. *Editor and Publisher,* March 18, 1978, 13 & 49.

Surveys sports editors of daily newspapers with 100,000 circulation or more by means of a questionnaire. Information concerning changes and trends, competition and strengths, personnel, space allocation and content, and production was gained. These metropolitan sports editors considered extensive coverage and good writing as the principal strengths of their departments and television and leisure activities as their major competition for readers' time. Sports departments are covering a wider variety of stories, many of them in-depth, and use between 10 and 20 percent of their paper's space.

Rubin, Barry. *International news and the American media.* (Washington Papers V:49) Beverly Hills, California: Sage, 1977. 71.

Reviews evidence of the decline of international news coverage in the American press. The obligation to inform the public often conflicts with profitability and satisfaction with the maximum number of readers. Since readership of international news is not so extensive as that of local and national news, coverage of this type is adequate in only the prestige press, which has the largest elite audience. Added to the media's problems are the coverage of the Third World, more complex international issues, fewer newspapers having their own foreign correspondents, maldistribution of the correspondents, and the necessity of informing the public of news that makes an impact upon the American public.

Peterson, Sophia. Foreign news gatekeepers and criteria of newsworthiness. *Journalism Quarterly,* Spring 1979, *56,* 116-125.

Investigates news selction by three groups of newsmen (home office editorial staff, staff correspondents, stringers who are not full-time reporters) who gather and process news for *The Times* of London. In a questionnaire seventy-three subjects ranked events according to their perception of the appropriateness of each for publication. Much similarity was noted in the rankings by the three groups of journalists. Differences noted were that items meaningful to those in the home office were not always so for the stringers. Cultural factors influenced the news preferences of the subjects and shaped news choices.

MATTA, FERNANDO REYES. The Latin American concept of news. *Journal of Communication,* Spring 1979, *29,* 164-171.

Concludes that the dependence of the Latin American press upon North American journalism and the transnational news agencies causes it to view news through foreign eyes, even that related to Latin American countries. The news agencies, especially UPI and AP, produce approximately 60 percent of the information published in Latin America, with another large percentage being produced by the European press. The dependency on news agencies is caused by economic difficulties and the concept of news held by journalists. Third world news reports are minimal when compared with coverage of other world areas and in terms of world population. Various kinds of news distortions are reported, especially those related to Latin American countries.

CULBERTSON, HUGH M. Veiled attribution--an element of style? *Journalism Quarterly,* Autumn 1978, *55,* 456-465.

Describes 1,030 veiled-attribution phrases in twelve issues, once per month, found in *Time* and *Newsweek,* published in 1976. Nouns and clusters of nouns were coded on fourteen variables describing the nature of the source and the amount and type of information given. The results were compared with those of daily newspapers in a 197 study. Veiled attribution occurred in 70 percent of *Newsweek's* stories and 75 percent of *Time's.* Attribution phrases emphasized partisan ties and words suggesting expertise. There was a tendency to personalize by quoting people as opposed to organizations.

ASSER, PAUL NIJHOFF. Some trends in journal subscriptons. *Scholarly Publishing,* April 1979, *10,* 279-286.

Surveys changes in circulation and price of scientific, technical and medical journals which were at least ten years old. The journals committee of the International Group of Scientific, Technical and Medical Publishers conducted the survey. The increase in total subscriptions in the ten years occurred almost entirely in countries with the larger journal programs. In general, the greatest increase in subscriptions was in the medical sciences; the greatest declines, physical and engineering/technological sciences. Journal publishers in the United Kingdom, the United States, and Germany reported a slight increase in exports. Research on subscription prices was also reported.

MCQUAIL, DENIS. *Review of sociological writing on the press.* (Working paper number 2). London: Royal Commission on the Press, 1976.

Delineates the main themes of sociological work on the press and summarizes part of the evidence which has accumulated.

III-12 Book publication

WINGER, HOWARD W. Scholarly use of renaissance printed books. *Library Trends,* April 1977, *25,* 733-743.

Reviews research concerned with books printed during the Renaissance and the use of these books today. It was pointed out that the change from manuscript to printed form was a qualitative one but also brought about a revolutionary increase in the quantity of available books. The many events from 1450 to 1700 created a bibliography of great range and variation in quality. The advantages of microfilm copies of these books were discussed; but for certain scholarly uses, such as dating manuscripts by watermarks on pages, the originals must be used. The scholarly work of researchers in preparing critical reviews, bibliographies, and citation studies was reviewed.

BLUMENTHAL, JOSEPH. *The printed book in America.* Boston: David R. Godine (in association with the Dartmouth College Library), 1977.

Traces the main currents in the typographical development of the printed book in America and presents its leading practitioners, both people and presses. The text covers the period from the beginnings in Cambridge, Massachusetts, in 1638 to the present decade. The first printing press arrived by British ship and was set up on the grounds of Harvard College. The first book published in the colonies appeared in 1640. During the seventeenth and eighteenth centuries, a number of new printers set up presses in the colonies where they printed almanacs and newspapers. In the latter part of the nineteenth century, a developing interest in arts and crafts in the United States was paralleled by the development of a group of designers and printers who led a renaissance of fine printing in America.

STOWELL, MARION BARBER. *Early American Almanacs: The Colonial Weekday Bible.* New York: Burt Franklin, 1977.

Explores colonial almanacs as a form of early American secular literature. Almanac publications during the seventeenth and eighteenth centuries outnumbered all other books combin[illegible] including religious. In the mid-eighteenth century, about 10,000 *Poor Richard* and 2,000 pocket almanacs were sold annually by Franklin & Hall. Another almanac, Ames's, sold between 50,000 and 60,000 annually. Both Franklin's and Ames's almanacs contend for the honor of setting a standard of excellence for the entire genre. Although ostensibly utilitarian, early almanacs also contained verses, essays, and personalized prefaces. Because of their popularity, almanacs both mirrored and influenced the times. Seventeenth century almanacs popularized Copernican theory and became an influential factor in converting literate colonials to a less primitive theory of the universe. Eighteenth century almanacs publicized Newtonian science. Eventually a number of mid-eighteenth century almanacs included such topics as resentment over taxation in their pages. As the influence of religion declined, almanacs aided increasingly to inculcate moral and social standards. The almanac was literally an indispensable aid and a constant companion to the colonial man of affairs.

SHUGG, ROGER W. Cuibono? *Scholarly Publishing*, October 1978, *10*, 3-15.

Traces the development and influence of the North American university press. By 1978, fourteen university presses organized by 1920, still survived. In spite of changes during the years, academic publishing has benefited three groups: universities in their public relations, professorial scholars who write, and the body of knowledge to which these books contribute. Discussed, with cited evidence, are changes in book manufacturing, the emergence and autonomy of the early presses, and the publication of dissertations. References are made to the work of different university presses.

SUTCLIFFE, PETER. *The Oxford University Press: an informal history.* Oxford: The Oxford University Press, 1978.

Traces the 500 years of publishing by the Oxford University Press with emphasis on the press developments since 1800. Based upon press files, letterbooks, notes, and Delegates' minutes, the history includes numerous names of publishers, editors, writers, and press officials as well as details of and changes in publication business and procedures. The press was transformed from a lucrative Bible house into a great national and international publishing business with branches located on six continents. Although many books published by the press are not mentioned, many others are described, such as *The Oxford Book of English Verse, The Dictionary of National Biography, The New English Dictionary,* and *The Oxford Book of England.* Problems concerning modernization, finance, and publication choices are included.

FABIAN, GERNHARD. English books and their eighteenth-century German readers. In Paul J. Kirshin (Ed.) *The widening circle: essays on the circulation of literature in eighteenth-century Europe.* Philadelphia: University of Pennsylvania Press, 1976. 117-196.

Considers the eighteenth century as the period of special significance for the intellectual exchange of ideas between England and Germany. English thought was transmitted to German readers through books or journals in the original language or in translation. Details of various aspects of book publication, book selling, and book reviewing are included: quantity of books, cities of publication, numbers of book publishers and book sellers, English writers known in Germany, competition among publishers for translations, demand for English books, the difficulty and expense of obtaining English books. Many important private libraries had larger collections of British books than public institutions. Books were read by men of letters, but little is known about the readership of English books by the general German public in the eighteenth century.

BECKER, JORG J. R. Textbooks and the political system in the Federal Republic of Germany, 1945-1975. *School Review,* February 1978, *86,* 251-270.

Reviews the role of textbooks and the relationship of textbooks and teachers, the state, the department of education in Germany. Textbooks are considered to be both a product and a factor of society and are described in three phases of German history: the transitional phase, 1945-51; the restoration phase, 1952-65; and the phase of conflict theory and the beginning of emancipatory instruction, 1966 to the present. Although few differences are noted between the textbooks analyzed of both 1957-59 and 1967-69, a considerable difference between books for junior and senior high school is found in the content presented.

Smith, Keith. Books and development in Africa--access and role. *Library Trends*, Spring 1978, *26*, 469-487.

Considers the determinants of readership of different book categories and the function the books play within the society of English-speaking Black Africa, the major focus being on Nigeria, Ghana, Kenya, Tanzania, and Zambia. Students are the major users of books since 80 percent of the book trade is educational publications. Deterrents to readership, book publication, and book buying are illiteracy (74 percent in non-Arab Africa in 1970), a vast number of languages, some spoken by comparatively few people, poverty, and attitudes toward books. The effect of books in African vernacular languages depends upon the type of book--textbook, literacy reader, or literary work. Popular literature is published for entertainment but does not command international readership.

III-13 Publication and history of juvenile books

Fenwick, Sara Innis. Scholarly research about historical children's books published in library science, English, social history, psychology, and art. *Library Trends*, Spring 1979, *27*, 529-549.

Examines the nature of research in historical children's books published in the United States. Some significant aspects of the research are assessed. These are: 1) topics selected for research, 2) types of research conducted, and 3) general quality and quantity of the research.

Rayward, W. Boyd. What shall they read? A historical perspective. *Wilson Library Bulletin*, October 1976, *51*, 146-153.

Traces the history of juvenile literature and the attitudes of adults towards children and their literature from the Middle Ages to the present time. Until the seventeenth century children were considered as short adults; few materials were written for them. In the time before the nineteenth century the principal issue was deciding which adult books were suitable for the instruction of the young; later the problem was knowing how to insure that children read the special literature provided for them and how to prevent them from reading the more harmful portions. Librarians had problems, as they still do, in the selection of books for libraries from the vast amount published. Literature for children gradually changed as books became more appealing to them and varied.

Haviland, Virginia. Books for America's children: 1776-1976. *Children's Literature in Education,* Spring 1978, *9,* 34-42.

Traces the general trends in children's literature in America from its beginning. Examples of children's books are given which represent the religious trends in early America, imported books in the latter half of the 1700s, the national spirit in the textbooks of the late eighteenth and early nineteenth centuries, and didacticism in the nineteenth century. In this succinct history of children's books are included discussions of such personalities as Parson Weems, Peter Parley, Jacob Abbott, and Samuel Clemens.

Lystad, Mary. At home in America: the family as seen in American books for children. *Children Today,* March/April 1979, *8,* 2-5.

Reviews the role of the American family as depicted in children's literature in the eighteenth, nineteenth, and twentieth centuries. Included are insights about the changing family composition, family interaction, and family relationships with the world. During the eighteenth century the nuclear family (father, mother, children) was portrayed as the center of economic, religious, educational, work, and leisure activities. The same was true for nineteenth century books except the home was less the center for economic and educational functions. In twentieth century literature the family was just as prominent as before but described in realistic rather than idealistic terms.

Geller, Evelyn. Somewhat free: post-civil war writing for children. *Wilson Library Journal,* October 1976, *51,* 172-176.

Describes the period in which the idea of reading for entertainment asserted itself in children's literature. In the post-Civil War era the legitimacy of entertainment was recognized. The principal qualities of the children's books, considered to be a new kind of classic, and children's magazines were literary and artistic proficiency, not moral worth. The new literature created a model of realistic family life but still placed it in a moral framework. The concern was not pleasure for its own sake, but amusement was linked to values which were fostered in the literature.

Wehmeyer, Lillian Biermann. Futuristic children's novels as a mode of communication. *Research in the Teaching of English,* May 1979, *13,* 137-152.

Proposes a communications research model and applies it through content analysis to children's fiction whose themes are world-future images. The purpose of the analysis was to determine if gatekeepers (authors, editors, librarians) of children's fiction eliminate or ease the harshest possibilities in world-future images. Of the 573 juvenile books screened, one title by each of forty-three authors met the criteria and was analyzed. Twelve content categories were established and were rated separately, followed by an overall rating. The world future portrayed reflected four optimism/pessimism levels. The Utopias, pastoral utopias, and dystopias found in adult literature have counterparts in children's fiction. These futuristic novels concluded in hope, not in despair, but were not more hopeful than books for older readers.

FITZGERALD, J. J. Fairy tales and folk stories: the significance of multicultural elements in children's literature. *Reading—UKRA,* December 1978, *12,* 10-21.

Shows how the literary genres of fairy tales and folk stories transcend cultural and national boundaries. Eight types of fairy tales are identified: animist tales, transformation tales, tales about slaying the evil, tales of magic sleep, Cinderella cycle, tales of the forbidden chamber, swan-maiden motif, and the separable soul tales. Examples are given from different countries, sometimes far flung, of the foregoing types of stories. The fairy tales created by many different people throughout the world have many common characteristics, as do folk stories. In the latter the symbols and what they represent, the events taking place, and the incidents of the careers of mythical heroes are similar in different cultures. A bibliography of folk stories and fairy tales appropriate for different reading levels is included in the report.

WHALLEY, JOYCE I. Secondary sources for the study of historical children's books. *Library Trends,* Spring 1979, *27,* 503-511.

Lists sources the author found useful in research on juvenile literature.

III-14 Reaction to printed materials

KINGSTON, ALBERT J., & LOVELACE, TERRY L. First graders' perceptions of stereotyped story characters. *Reading Improvement,* Spring 1979, *16,* 66-70.

Examines drawings of thirteen first grade pupils after they had listened to stories in which the stereotyped protagonists were presented in first person and later rewritten with the name of the male and female included. Character foils of the opposite sex to the first-person protagonist were included. Both boys and girls correctly identified the protagonists as being either male or female; they portrayed male characters as larger than the female ones. No difference in color use (vivid vs. pale colors) was noted as the children tended to blend the colors randomly. In almost all cases the focus of the picture was upon characters, not activities. It was concluded that sex-role stereotypes develop in children before school age.

FRANCIS, LESLIE. How the press reports surveys. *New Society,* April 5, 1979, *48,* 25.

Reports the reactions of British newspapers to a survey which revealed that sex, flying saucers, and religion were highly rated news items. Most of the newspapers carried the news but reported it differently. The national tabloids used sensationalism; several papers covered it from a religious perspective; several reported the reactions of the clergy.

HEIKKINEN, CHARLES A. Subscriber perceptions of the *Journal of Counseling Psychology. Journal of Counseling Psychology,* July 1978, *25,* 352-355.

Surveys 415 current and 234 past subscribers to the *Journal of Counseling Psychology* regarding the perceived utility, strengths, and weaknesses of the articles in relation to readers' characteristics. Participants supplied information about demographic and work background. Among the results are the following: present subscribers used the journal most for research and counseling ideas. Strengths included research/methodology, relevance to practice, writing quality, scholarly vigor; weaknesses noted were esoteric, narrow research and lack of practical relevance. Utility appeared to be related to individual needs. Differences between present and past subscribers appeared to be professional rather than demographic.

LUCE, TERRENCE S., & JOHNSON, DALE M. Rating of educational and psychological journals. *Educational Researcher,* November 1978, *7,* 8-10.

Assesses the prestige value of seventy-four educational and psychological journals through questionnaires completed by 682 American Educational Research Association members. Subjects were asked to rank the journals they considered to be the top ten. The rankings were determined for the members as a whole, for members of the various divisions of the organization, and for different work positions (higher education, public or private common schools, government, non-academic research). The results showed that there is no one top-ten list of educational or psychological journals but a top-ten list for each interest area in education and for each work position. Little agreement was noted between psychologists and educators as to what constitutes the top-ten list.

LARKIN, ERNEST F., & GROTTA, GERALD L. The newspaper as a source of consumer information for young adults. *Journal of Advertising,* 1977, *6*(4), 5-10.

Determines the wants, needs, and desires concerning daily newspapers of 185 young adults, ages 19 to 34, who responded to a questionnaire which had been developed earlier through a series of group interviews. Analysis of the data revealed they had a more favorable attitude toward television than toward newspapers, ambivalent attitudes toward media bias and media performance, more favorable attitudes towards newspaper advertising than television advertising, and preferences for newspaper content which would help them cope with daily living problems. They viewed teleivision primarily as entertainment but newspapers for specific information of interest to them.

PIEHL, JOCHEN. The effects of price and range of potential readers upon evaluation of psychological textbooks. *The Journal of Psychology,* November 1977, *97,* 275-279.

Investigates the reaction of sixty college students in a West German university to price and availability of psychological textbooks. The subjects rated six books as described by the book jackets and stated how much they wanted to read the books. Half of the subjects received information about the high price of the book; the others, the low cost. Half were told that the book was for psychologists and students of psychology only; the others, that the book addressed itself to other professional groups. The results supported the commodity theory to some extent as the price of the book tended to determine its valuation. The influence of the range of potential readers seemed less clear.

III-15 Effects of reading

CROMER, GERALD. Character assassination in the press. In Charles Winick (Ed.) *Deviance and mass media* (Vol 2). Beverly Hills, California: Sage Publications, 1978. 225-241.

Reviews research of the interaction of crime and media and the sociological implications of prejudicial publicity. Included in the review are such topics as types of materials that should be considered prejudicial, the extent to which they influence jurors, different ways of dealing with the problem, amounts and effects of law and order news, the role of the free press, and effects of prejudicial publicity.

MCCLENEGHAN, J. SEAN. Effect of endorsements on news space in Texas papers. *Journalism Quarterly*, Winter 1978, *55*, 792-793.

Compares amounts of news space coverage of eleven different mayoral races with editorial endorsements in fifteen Texas newspapers between 1975-77. News stories, pictures, editorials, and ads concerned with mayoral candidates were measured in column inches; editorials were coded for candidate endorsements. Endorsed candidates won 53 percent of the time; opponents rather than endorsees received more column space and more pictorial coverage. Editorial pages only favored endorsed candidates.

SCOTT, KATHRYN P., & FELDMAN-SUMMERS, SHIRLEY. Children's reactions to textbook stories in which females are portrayed in traditionally male roles. *Journal of Educational Psychology*, June 1979, *71*, 396-402.

Tests the effects on sixty-seven female and forty-four male third and fourth graders' perceptions of sex roles and story evaluations when female characters were portrayed in traditionally male roles. Each story had two versions, one with a female main character; the other, a male. The subjects read two stories in one of three experimental conditions each week for four weeks and indicated who could do what the main character did and how good they thought each story was. They also completed a questionnaire to assess sex role perceptions. Exposure to female main characters in nontraditional male roles increased children's perceptions of the number of girls who could engage in the same activities but did not affect perceptions of other sex role activities not presented in the story. Although females evaluated the stories more positively than males, story evaluations did not vary as a function of the sex of the main character.

Tibbetts, Sylvia-Lee. Wanted: data to prove that sexist reading material has an impact on the reader. *The Reading Teacher,* November 1978, *32,* 165-169.

Asserts that more data are needed to support the widespread belief that sexism is transmitted through reading materials.

Knell, Susan & Winer, Gerald A. Effects of reading content on occupational sex role stereotypes. *Journal of Vocational Behavior,* February 1979, *14,* 78-87.

Investigates effects of reading material on child's tendency to associate a person's sex with a particular occupation. Each of the ninety preschooler subjects was assigned to one of four story groups and listened to stories which were written to show traditional and nontraditional portrayals of males and females in different occupations. Posttests concerning story preference, projection of their place in vocations, awareness of adult roles, and toy preference were given to the subjects. Girls who heard stories depicting traditional relations between the sex of the worker and type of occupation showed more stereotyped behavior than others who read control stories or stories portraying relations between sex and occupation. Boys appeared more stereotyped than girls in attitudes towards occupational sex roles.

Kraus, Sidney, & Davis, Dennis. *The effects of mass communication on political behavior.* University Park: The Pennsylvania State University Press, 1976.

Reviews the knowledge base in the social and behavioral sciences on the effects of mass communication on political behavior and determines what is known, what is not yet known, and what ought to be known. Some 3,000 sources were received for the investigation.

Thorndyke, Perry W. Knowledge acquisition from newspaper stories. *Discourse Processes,* April/June 1979, *2,* 95-112.

Reports the findings of two experiments in which subjects' (sixty and forty-five undergraduates) acquisition of information from newspaper stories was tested to determine the overall effect of various kinds of organizations on the learning of meaningful texts. Subjects read one of four newspaper stories, written as an actual newspaper story or modified by the deletion of information with the remaining information restructured into either a narrative, topical, or outline form. Any of the condensed versions led to better recall than the entire version; those who read the intact newspaper story learned little of the irrelevant information compared to the other information in the story. None of the reorganization structures of the information led to consistently superior recall.

Gawn, Janet. Does the press incite hooligans? *New Society,* November 16, 1978, *46,* 398-399.

Relates the amount and type of press reporting of hooliganism and its occurrence at games played by two Manchester schools during the 1975-76 season. Reports of hooliganism appearing before and after games in three newspapers were measured in column centimeters; the content was classified as predominantly provacative, deterrent, preventive, or neutral. Hooliganism was measured by the number of people arrested or summoned by the police at each game. Almost half of the press reporting of hooliganism occurred during the first month; one school received more coverage than the other school, this situation not conveying an entirely accurate picture. No relationship was found between the amount of pre-match reporting and the amount of unruly behavior that occurred subsequently.

BECKER, LEE B.; GLAVIN, WILLIAM A., JR.; POINDEXTER, PAULA M.; & BURNHAM, ROBERT J. Reportorial involvement and its effects on readers *Mass Communication Review*, Fall 1977, *4*, 23-27.

Presents findings from two studies of the effects upon readers of reporter involvement in the story being told. In the first study three versions of a story about skydiving were randomly distributed to volunteers who read only one version. Each story was an identical account except that the involvement of the reporter in telling the story was varied. Twenty-two subjects read each story. Based upon their completed questionnaires, no differences among readers of the three versions were found for enjoyment, credibility, fact retention, and interest in additional information. In the second study controversy and reporter involvement were manipulated. Two versions of two stories (controversial and non-controversial) were distributed to 102 people, each reading one of the four versions. The analyses revealed no differences for the same variable among the versions. Those reading controversial pieces were significantly less likely to think involvement the better strategy than those reading the non-controversial selection.

MCCOMBS, MAXWELL E., & SHAW, DONALD L. The agenda-setting function of the press. In Donald L. Shaw & Maxwell E. McCombs (Eds.) *The emergence of American political issues: the agenda-setting function of the press.* New York: West Publishing Company, 1977 1-18 & 171-208.

Examines the question of whether or not the press influences human affairs via the choices it makes concerning what will be published and when items will be published. Includes a section on empirical evidence of agenda setting.

III-16 Research techniques

BUSCH, LAWRENCE. On understanding understanding: two views of communication. *Rural Sociology*, Fall 1978, *43*, 450-473.

Presents two research models or traditions and applies each to communication research. The adoption-diffusion model is concerned with innovations while the hermeneutic-dialectic one is concerned with texts. Although there has been little, if any, connection between the two, both are concerned with understanding how understanding takes place. The two traditions are compared on eight background assumptions: ontology, language, intentionality, understanding, communications model, commensurability, structure, tradition and modernity. It is suggested that research in the field be broadened to include both traditions.

LOWRY, DENNIS T. Population validity of communication research: sampling the samples. *Journalism Quarterly,* Spring 1979, *56,* 62-68, 76.

Evaluates the adequacy of the reporting of sampling procedures and sample characteristics in seven communication journals from 1970 through 1976. A 25 percent sample from each journal, totaling 297 communication research studies, was analyzed. The writer concluded that the vast majority of the communication research analyzed could not be replicated by an experienced researcher as between 54 and 79 percent did not state clearly the type of sample used, the population, sampling frames and procedures, and completion rates. In studies employing human subjects, between 31 and 79 percent did not specify the sex, age, occupation, or educational levels of the subjects.

SIMONTON, DEAN KEITH. Time series analysis of literary creativity: a potential paradigm. *Poetics,* June 1978, *7,* 249-259.

Explains the application of time-series analysis to literary creativity. Two types of time series are discussed: biographical, consisting of consecutive observations of the lives of important writers and transhistorical, comprising consecutive observations of an entire nation, culture, or civilization. Events or situations are quantified over equally spaced time units, the exact time unit depending upon the nature of the problem being investigated. Either time unit can be subjected to correlational, quasi-experimental, or multiple regression analyses.

RIES, PAUL. The anatomy of a seventeenth-century newspaper. *Daphnis: Zeitschrift fur Mittlere Deutsche Literatur,* 1977, *6*(1-2), 171-232.

Describes methodology used in studying contents of newspapers and applies the methodology to an analytic and comparative study of four German-language newspapers, published in Hamburg and Copenhagen in 1669. The method was principally concerned with determining how news was obtained, selected, presented, and distributed. The research used 30 of the 50 newspapers published at that time in German, Dutch, Danish, Italian, Latin, French, and English. Information from the analyses of the newspapers was computerized and included numbers of reports published by newspapers, percentages of reports covered, sources, delays, and characteristics of coverage. Through a detailed analysis of newspapers, Ries concluded that one seventeenth century paper was not original but was the Copenhagen edition of a Hamburg paper. He recommended that national boundaries in newspaper research be abandoned.

WINDHAUSER, JOHN W., & STEMPEL, GUIDO H., III. Reliability of six techniques for content analysis of local coverage. *Journalism Quarterly,* Spring 1979, *56,* 148-152.

Describes and compares results of different content analysis procedures for campaign newspaper coverage. Local political news and editorials of the Democratic and Republican parties in twelve Ohio metropolitan newspapers were analyzed for a 35-day period in 1971 by six techniques: article, space measurement, statement, issue single, issue multiple, and headline. Campaign content was also classified as favorable or unfavorable. All six measures correlated with each other for news and editorial content, both combined and separate, regardless of the slant of the content. The space measurement was recommended because it was the most simple and quickest method for analyzing news or editorials concerned with party affiliation.

Golding, Peter, & Murdock, Graham. Theories of communication and theories of society. *Communication Research,* July 1978, *5,* 339-356.

Synthesizes critiques of communication studies and traces the development of theories of mass communication.

IV. Physiology and psychology of reading

IV-1 Physiology of reading

Gross, K.; Rothenberg, S.; Schottenfeld, S.; & Drake, C. Duration thresholds for letter identification in left and right visual fields for normal and reading-disabled children. *Neuropsychologia,* 1978, *16*(6), 709-714.

Examines duration thresholds for identification of letters in the right and left visual fields of twenty-nine normal and disabled readers aged 10 to 13 years. Electro-oculography monitoring of eye position was used to insure central fixation during stimulus presentation. Reading disabled subjects showed higher thresholds for stimuli in both hemifields and a greater difference between thresholds for left- and right-hemifield stimuli than normals. However, high variability among disabled readers compared to normals on the recognition task was evidenced.

Lefton, Lester A.; Fisher, Dennis F.; & Kuhn, Donald M. Left-to-right processing of alphabetic material is independent of retinal location. *Bulletin of the Psychonomic Society,* September 1978, *12,* 171-174.

Investigates the effects of retinal location, serial letter position, and approximation to English on accuracy of twenty college subjects' report for tachistoscopically presented letter arrays. Main effects proved to be significant. Accuracy was higher for arrays symmetrically located in central field than for arrays located in left or right visual field. Letters are processed from left to right regardless of retinal location. Middle letters in serial arrays are most affected by retinal location and are less accurately perceived.

Endo, Masaomi; Shimizu, Akinori; & Hori, Tadao. Functional asymmetry of visual fields for Japanese words in *Kana* (syllable-based) writing and random shape-recognition in Japanese subjects. *Neuro-sychologia,* 1978, *16,* 291-297.

Examines behavior of eighteen right handed Japanese university women in responding to random shape, 2-syllable nonsense words presented to right or left of center in visual field. Results indicate that reaction time was shorter for shape recognition when left visual field and right hand were combined. For pair recognition, reaction time was shortest when right visual field was combined with right hand.

GOOLKASIAN, PAULA. Reading and detecting color-word stimuli presented at various retinal locations. *The Journal of Psychology,* November 1978, 100, *167-181.*

Examines, in four experiments using a total of seventy college students, the speed and accuracy of reading and detection responses to color-word stimuli presented at retinal locations from the center out to 6° in the right and left visual fields. Reading and detection responses were found to interact with retinal location. For stimuli presented at the farther retinal location, detection responses were quicker and more accurate than reading responses, but the reverse occurred with foveally presented stimuli. The Stroop phenomenon was present in the detection data and was found to be diminished with parafoveal presentation of the stimulus materials.

SAFFRAN, ELEANOR M., & MARIN, OSCAR S. M. Reading without phonology: evidence from aphasia. *Quarterly Journal of Experimental Psychology,* 1977, *29,* 515-525.

Describes the reading performance of a 51-year-old woman who suffered a cerebrovascular accident that resulted in extensive lesions of the posterior temporal region of the left hemisphere. The subject's reading vocabulary was estimated to be 16,500 words, based on the administration of 200 randomly chosen words from the Thorndike-Lorge list. Further, the subject was administered the *Peabody Picture Vocabulary Test,* a nonsense word test, and her semantic and syntactic contextual reading errors were analyzed. The subject was generally unable to perform operations that critically depended on grapheme-to-phoneme conversion; these included pronouncing nonsense words, recognizing rhymes and homophones, and accessing lexical entries from homophonic spelllings such as "kote." The findings also generally indicated that there exist separate visual and phonological pathways in reading and that reading performance is mediated by letter identification rather than by a wholistic method of word recognition.

DEWEERDT, C. J., & VANRIJN, A. J. Conditioning therapy in reading epilepsy. *Electroencephalography and Clinical Neurophysiology,* October 1975, *39,* 417-420.

Reports a case study involving a 19-year-old female who suffered from primary reading epilepsy. The subject reported symptoms of "dancing letters" after reading and jaw, mouth, and tongue muscle spasms associated with feelings of malaise. The patient was requested while reading to hit her thigh with her hand each time the letter "e" occurred; at a later stage other, less frequent vowels were used. The patient read under supervision three times per week, and practiced at home for two brief periods each day. After treatment, pathological activity in EEG readings decreased substantially.

BAKKER, DIRK J., & VAN RIJNSOEVER, RAYMOND. Language proficiency and lateral position in the classroom. *Bulletin of the Orton Society*, 1977, *27*, 37-53.

Investigates the effect of spatial position in the classroom on the processing of spoken lingual information arriving from the left and right lateral planes with fifty-seven second and fourth graders. Sixty pairs of words were presented via speakers placed in different lateral planes in the classroom. Subjects were required to discriminate the phoneme pairs. Additionally, a dichotic digit test and a hand preference test were administered. Reading data were also collected. Second graders made three times as many errors when sitting in the corners of the classroom; fourth graders made twice as many in the corner positions. Center-seated groups also showed higher standard reading scores than outer groups. Additional results are reported.

HATTA, TAKESHI. Lateral recognition of abstract and concrete *Kanji* in Japanese. *Perceptual and Motor Skills*, December 1977, *45*, 731-734.

Presents abstract and concrete non-phonetic logographic symbols (Kanji) in a unilateral fashion in either the left or right visual field to fifteen male and fifteen female adults. Performance of the group was superior for both abstract and concrete Kanji in the left visual field. Concrete Kanji were more correctly recognized than abstract Kanji in the left visual field. The author concluded that the results suggest the right hemisphere possesses some ability to process verbal materials.

ENGEL, R., & FAY, W. Neonatal visual evoked potentials as predictors of language performance test scores at age eight. *Electroencephalography and Clinical Neurophysiology*, March 1976, *40*, 332.

Investigates the utility of latency measurements of the large late visual evoked potentials (VEP) in response to a bright flash among 958 neonates as a predictor of IQ and language ability of ages 7 and 8. VEP measures were correlated with scores on the Peabody Picture Vocabulary Test, Gray Oral Reading Test, Templin-Darley Articulation Test, Writing from Dictation, and the Auditory-Vocal Automatic Subtest of the Illinois Test of Psycholinguistic Abilities. VEP latencies were found to be poor predictors of intellectual and language performance at school age.

OBRZUT, JOHN E. Dichotic listening and bisensory memory skills in qualitatively diverse dyslexic readers. *Journal of Learning Disabilities*, May 1970, *12*, 304-314.

Classifies normal and dyslexic readers according to their qualitative performance characteristics and investigates dichotic listening and bisensory memory skills among 144 male second and fourth graders. Subjects were classified as three types of dyslexic readers: dysphonetic (auditory dyslexic), dyseidetic (visual dyslexic), and alexic (combined). A dichotic listening task was used to assess cerebral dominance and auditory recall ability; a bisensory memory task was used to assess auditory-visual integration ability. Results of the dichotic and bisensory tasks indicated that normal and dyseidetic readers were able to attend, store, and retrieve stimuli at both grades and experimental rates of stimulus presentation better than alexic or dysphonetic readers. Ear asymmetry, as measured by dichotic right-ear advantage, did not discriminate normals from dyslexics.

Garrity, Linda I. Electromyography: a review of the current status of subvocal speech research. *Memory and Cognition,* November 1977, *5,* 615-622.

Evaluates electromyographic studies of subvocal speech. Includes research on subvocalization during reading.

Leisman, Gerald, & Schwartz, Joddy. Ocular-motor variables in reading disorders. In Robert M. Knights & Dirk J. Bakker (Eds.) *The neuropsychology of learning disorders: theoretical approaches.* Baltimore, Maryland: University Park Press, 1976. 333-348 & 469-521.

Indicates the utility of employing basic approaches in combination with classroom studies in order to examine the role of various brain structures active during reading and other visual processing. Relevant research is cited.

Masland, Richard L. The advantages of being dyslexic. *Bulletin of the Orton Society,* 1976, *26,* 10-18.

Contends that parts of a previous neurological explanation for reading disorders have been empirically supported. Cites specific research as evidence.

Harris, Albert J. Lateral dominance and reading disability. *Journal of Learning Disabilities,* May 1979, *12,* 337-343.

Reviews theory and research on the relation of lateral dominance to the causation of reading disability.

Satz, Paul. Cerebral dominance and reading disability: an old problem revisited. In Robert M. Knights & Dirk J. Bakker (Eds.) *The neuropsychology of learning disorders: theoretical approaches.* Baltimore, Maryland: University Park Press, 1976, 273-294 & 469-521.

Reviews literature on cerebral dominance and reading disability. Suggests that there are many unanswered questions.

Hynd, George W., & Obrzut, John E. Differential assessment of cerebral dominance and developmental reading disorders using the dichotic listening task. *Psychology,* May 1978, *15,* 1-16.

Proposes that the dichotic listening task can provide school psychologists with data for diagnosing some reading disabled children. Cites research on cerebral functioning and reading disorders.

DEAN, RAYMOND S. Cerebral laterality and reading comprehension. *Neuropsychologia,* 1978, *16*(5), 633-636.

Compares the laterality preferences of three classifications of seventh and eighth grade pupils as determined by Vocabulary and Comprehension results of the *California Achievement Test:* fifty good readers scoring at or above grade placement in the vocabulary and comprehension subtests, fifty difference poor readers scoring one-and-one-half years or more below grade placement in comprehension but less than one year below grade level in vocabulary, and forty deficit poor readers scoring a year or more below placement in vocabulary as well as one-and-one-half years below level in comprehension. Laterality preference was assessed with the *Sherman-Kulhavy Inventory.* Significant main effects were obtained for reading groups. Difference readers were significantly more bilateral than either good or deficit reader groups, although results varied among the inventory's four analytic factors.

DOEHRING, DONALD G. Evaluation of two models of reading disability. In Robert M. Knights & Dirk J. Bakker (Eds.) *The neuropsychology of learning disorders: theoretical approaches.* Baltimore, Maryland: University Park Press, 1976. 405-411 & 469-521.

Indicates some of the ways in which theoretical analyses can broaden our perspective regarding reading and learning problems and their relation to brain functioning.

HUGHES, JOHN R. Biochemical and electroencephalographic correlates of learning disabilities. In Robert M. Knights & Dirk J. Bakker (Eds.) *The neuropsychology of learning disorders: theoretical approaches.* Baltimore, Maryland: University Park Press, 1976. 53-69 & 469-521.

Deals with biochemical and electroencephalographic correlates of learning disabilities. Some reading research is reviewed.

IV-2 Sex differences

COURTNEY, DAN, & SCHELL, LEO M. The effect of male teachers on the reading achievement of father-absent sixth grade boys. *Reading Improvement,* Winter 1978, *15,* 253-256.

Studies the effect of male teachers on reading achievement scores of father-absent sixth-grade boys. Ninety boys assigned to forty male teachers and 103 boys assigned to forty-six female teachers were given the Reading Comprehension subtest of the *Iowa Test of Basic Skills* (ITBS) as both pre- and posttest measures. An analysis of covariance technique with IQ and grade 5 ITBS score as covariates was used in analyzing the data. No evidence was found to support the thesis that male teachers enhanced the reading achievement scores of father-absent boys.

GROSS, ALICE DZEN. Sex-role standards and reading achievement: a study of an Israeli kibbutz system. *The Reading Teacher,* November 1978, *32,* 149-156.

Analyzes test results obtained on 305 Israeli kibbutz children in kindergarten, grade 2, and grade 5 for sex-linked reading achievement differences. Subjects were randomly drawn from a population of [illegible] kibbutz children. Ninety-nine second graders and 108 fifth graders were administered *Ortar's Mivchan Hovana Nikra,* a standardized reading test, as well as *Downing's Activity-Object Opinion Survey* for measuring sex-role standards via reading. These subjects were divided into groups of superior and disabled readers and were further administered the *Edinburgh Handedness Test* for crossed dominance and evaluated on 12 indices of psychopathology which could be related to the theory of male organismic vulnerability. The 97 kindergartners in the study were administered the *Bender-Gestalt Test.* Sex-role standards was the only variable found to be significant. On a masculine scale the boys perceived reading as more masculine than did the girls; both sexes perceived reading as sex-appropriate. No significant sex differences were found on reading performance level, on reading readiness level, on percentages of reading disability cases, or on proportions of occurrence in a superior reading group.

GROSS, ALICE DZEN. The relationship betwen sex difference and reading ability in an Israeli Kibbutz system. In Dina Feitelson (Ed.) *Cross-cultural perspectives on reading and reading research.* Newark, Delaware: International Reading Association, 1978. 72-88.

Compares the performance of 316 kindergarten, 284 second, and 350 fifth grade boys with that respectively of 297, 256, and 368 girls in a kibbutz on readiness, reading, and personal variables. Tests included *Ortar's Hebrew Reading, Bender-Gestalt, Edinburgh Handedness Inventory,* as well as subject evaluation on twelve indices of psycho-physiological fitness. No significant differences were revealed between the sexes in readiness, reading comprehension, psychopathology, maturational lag, dominance, stress vulnerability, or reading disability. Thirteen percent of both sexes were deemed disabled in reading when criteria consisted of scoring in lowest 15 percent of test norms plus referral for remediation.

WILSON, JOHN A. Over- and underachievement in reading and mathematics. *The Irish Journal of Education,* Summer/Winter 1975, *9,* 69-76.

Tests the hypothesis that reading and mathematics ability, regressed on non-verbal intelligence, will each be normally distributed, except that underachievement in reading and overachievement in mathematics would be greater than expected, and that underachievement in reading would be greater for boys than for girls. Test scores for 4,554 7- and 10 year-olds were analyzed; additionally, a group test of picture intelligence was administered to the 7-year-olds, and the 10-year-olds completed group tests of verbal and non-verbal ability. Only the non-verbal test data were used with the 10-year-olds. The hypothesis that over- and underachievement in reading and mathematic abilities would approximate the normal distribution was confirmed. However, the hypothesis that pupil overachievement in mathematics and boys' underachievement in reading would each exceed statistical expectation was confirmed for mathematics but not for reading ability.

CROW, THOMAS A. Correlations among children's academic achievement, strength, motor skills, and self-control. *Perceptual and Motor Skills,* August 1978, *47,* 86.

Intercorrelates academic achievement, strength, motor skills, and self-control among 217 second grade children. Subjects were administered the *Comprehensive Tests of Basic Skills,* the *Strength Test Battery, Motoric Skills Battery, Walk-A-Line* test, and *Draw-A-Line* test. Girls were significantly higher on total achievement and reading and in language than boys. The highest univariate correlation of an academic achievement variable with a non-academic variable was between mathematics and strength, where 3.8 percent of the variance was in common and the correlation coefficient between the two scores was .196.

KLEIN, HOWARD A. A closer look at cross-cultural sex differences in reading. *The Reading Teacher,* March 1979, *32,* 660-664.

Reanalyzes the results of a prominent study of cross-cultural sex differences in reading and suggests that the study may have been overgeneralized by others.

IV-3 Intellectual abilities and reading

FRASE, LAWRENCE T. Inference and reading. In Russel Revlin & Richard E. Mayer (Eds.) *Human Reasoning.* New York: John Wiley & Sons, 1978. 185-194.

Discusses some of the complicated aspects of reasoning during reading and describes some implications of reasoning studies for understanding reading. Also discusses ways in which understanding reading can help to understand reasoning tasks.

HARBER, JEAN R. The influence of abstract reasoning ability and degree of bidialectism on third and fifth graders' reading performance. *Educational Research Quarterly,* Spring 1978, *3,* 34-39.

Examines the degree of influence of abstract reasoning ability and bidialectism on the reading performance of 180 third and fifth grade inner city Black children. Abstract reasoning was measured by the *Raven Coloured Progressive Matrices,* bidialectism by the *Baratz Sentence Imitation Test,* listening comprehension by the *Temple University Informal Reading Inventory,* and oral reading ability by the *Gray Oral Reading Test.* Abstract reasoning ability significantly affected reading performance while expressive proficiency in

Standard English and Black English did not affect scores. The interactions between abstract reasoning ability and degree of bidialiectism reached significance for the oral reading and oral reading comprehension tasks.

BECHER, RHODA MCSHANE, & WOLFGANG, CHARLES H. An exploration of the relationship between symbolic representation in dramatic play and art and the cognitive and reading readiness levels of kindergarten children. *Psychology in the Schools,* July 1977, *14,* 377-381.

Explores the relationship between symbolic representation in dramatic play and art and the cognitive and reading readiness levels of seventy-nine kindergarten children. More specifically, the performance of kindergarten children on the conservation of number tasks, the *Metropolitan Reading Readiness Test,* and their involvement and/or level of symbolic representation in dramatic play were studied. Results indicated that subjects at the concrete operational stage performed significantly higher on the *MRRT* than preoperational subjects, spent less time involved in dramatic play than preoperational subjects, and expressed significantly higher levels of symbolic representation in dramatic play than did preoperational children.

WAERN, YVONNE. On the relationship between knowledge of the world and comprehension of texts: assimilation and accommodation effects related to belief structure. *Scandinavian Journal of Psychology,* 1977, *18,* 130-139.

Presents two studies investigating the effect of fifty-seven college readers' world knowledge on comprehension of a text (assimilation effect), and the effect of the reading of the text on readers' knowledge of the world (accommodating effect). With regard to assimilation, the results indicated that the average subject in both studies interpreted the text to have a meaning more similar to his/her own beliefs than was actually the case. For accommodation, the younger subjects' own beliefs changed in the direction of the text, whereas the beliefs of the older subjects became more adamantly opposed to the text.

BRITTON, BRUCE K.; HOLDREDGE, TIMOTHY S.; CURRY, CHERYL; & WESTBROOK, ROBERT D. Use of cognitive capacity in reading identical texts with different amounts of discourse level meaning. *Journal of Experimental Psychology: Human Learning and Memory,* May 1979, *5,* 262-270.

Investigates the cognitive capactiy of ninety-six college students in two experiments. Cognitive capacity in reading was measured in pairs of passages that differed in the quantity of main meaning they contained but were equal in word length, word frequency, sentence length, and grammatical complexity. The passages were visually identical except that one passage had a title that related the sentences to each other and gave them meaning as a discourse, whereas the other passage lacked the title and had less discourse level meaning. The primary finding was that cognitive capacity was filled more completely in reading passages with more discourse level meaning. In the second experiment, capacity was measured in passages that had meaning with or without a title. Titles were provided in one group but not in the other. The titles had no effect.

BURIEL, RAYMOND. Relationship of three field-dependence measures to the reading and math achievement of Anglo-American and Mexican-American children. *Journal of Educational Psychology*, April 1978, *70*, 167-174.

Analyzes the relationship between field-dependence and reading achievement with forty Mexican-American and forty Anglo-American first through fourth graders. More specifically, the study addressed questions of consistency of cross-cultural differences, intercorrelations, and predictive validity among measures of field-dependence and reading. Tests administered were the *Portable Rod-and-Frame Test, Children's Embedded Figures Test, WISC* (Block Design subtest), and the *Metropolitan Achievement Test*. Findings revealed discrepancies in the relationship of the three field-dependence tests between the two groups and between these tests and school achievement. Results failed to support the assumptions that Mexican-American children are more field dependent than Anglo-American children. None of the three cognitive style tests were significantly related to reading for members of either cultural group. Girls in both groups scored significantly higher in math than boys. The two groups did not differ significantly in either math or reading achievement.

SVENSSON, L. On qualitative differences in learning: III--study skill and learning. *British Journal of Educational Psychology*, November 1977, *47*, 233-243.

Reports a study of thirty college students, the purpose of which was to collect instances of study skill usage in different situations, and to relate study activity to levels of understanding and academic performance. Subjects were presented a passage that they read without time limit; they were tested immediately on the content of the passage and asked to give introspective reports regarding how they had approached the reading assignment. Five weeks later, subjects were retested on the original content and asked to read an additional passage which was an extension of the first. After another interval of five weeks, subjects were asked to recount what they remembered of the second article. All test sessions ended with questions about the students' normal study activities. It was discovered that the distinction between holistic and atomistic cognitive approaches was consistent over different occasions when students were asked to read and to recall their knowledge of the two texts. Those subjects who utilized a holistic approach tended to have higher academic attainment.

MCKINNEY, JAMES D., & FORMAN, SUSAN G. Factor structure of the Wallach-Kogan tests of creativity and measures of intelligence and achievement. *Psychology in the Schools*, January 1977, *14*, 41-44.

Gives the *Wallach-Kogan Tests of Creativity* to 129 grade two pupils to determine the factor structure, and compares the factors with those from the

Primary Mental Abilities Test and the Vocabulary, Reading Comprehension, and Mathematics Skills subtests of the *Iowa Test of Basic Skills,* Level 8. Significant sex differences were obtained on the Iowa but not on the other two tests. The average correlation coefficient between the creativity subtests and the Iowa subtests was .15. Five factors were identified from the three tests. The two creativity factors were independent of those defined by the intelligence and achievement measures.

Fuller, Renee. *In search of the IQ correlation.* Stony Brook, New York: Ball-Stick-Bird Publications, 1977.

Presents an analysis of a series of small sample clinical training studies relating the influence of appropriate experiences to the learning progress and evaluation of clinical subjects, particularly children considered to have low IQ's. Presented in a readable format, the ten chapters provide background on intelligence testing, examples of tests and reading materials employed in clinical programs, quantitative results, qualitative changes, and a heuristic interpretation which raises questions about the viability of the IQ construct.

Hartlage, Lawrence C., & Boone, Katherine E. Achievement test correlates of Wechsler Intelligence Scale for Children and Wechsler Intelligence Scale for Children--Revised. *Perceptual and Motor Skills,* December 1977, *45,* 1283-1286.

Correlates scores of original and revised form WISC with *Wide Range Achievement Test* (WRAT) and *Comprehensive Test of Basic Skills* (CTBS) performance for forty-two fourth and fifth grade pupils including twenty boys and twenty-nine Black pupils. WISC and WISC-R Full Scale, Verbal, and Performance IQ's intercorrelated significantly. Verbal and Full Scale IQ's on both WISC and WISC-R were positively and significantly related to WRAT reading (.41 to .59). Slightly higher (+.5 to +.7) significant coefficient correlations were obtained between the WISC and WISC-R and the CTBS reading score. Coefficient correlations of Verbal IQ were significantly higher than Performance IQ with both WRAT and CTBS. IQ correlation coefficients with spelling ran lower (.11 to .57) than with reading (.27 to .72) and arithmetic (.26 to .69).

Moore, Warren D.; Hahn, William G.; & Brentnall, Lynn C. Academic achievement of gifted children: a comparative approach, *Exceptional Children,* May 1978, *44,* 618-619.

Utilizes a multivariate discriminant analysis to compare performance of gifted and normal samples of fifth, sixth, and seventh grade subjects on the eleven subtests of the *Iowa Achievement Test.* Mean Slosson IQ of the fifty-one gifted subjects was 134; mean IQ for normal sample was 104. Best discriminators were measures of vocabulary, mathematics concepts, spelling, and interpretation of graphs. Capitalization, reading comprehension, arithmetic, calculation, and grammar were poor discriminators. However, reading comprehension and arithmetic calculation contributed strongly to the prediction of total achievement.

MURRAY, FRANK B. Critique: development of intellect and reading. In Frank B. Murray & John J. Pikulski (Eds.) *The acquisition of reading: cognitive, linguistic, and perceptual prerequisites.* Baltimore: University Park Press, 1978. 55-60.

Responds to the argument that the acquisition of reading does not contribute to the development of intelligence. Reviews related literature.

MILLER, MAURICE; BRECHT, RICHARD D.; & RICHEY, D. DEAN. Cognitive deficits in reading comprehension (a call for research) *Journal of Learning Disabilities,* November 1978, *11,* 576-579.

Proposes a structure of intellect (SOI) interpretation to identify cognitive process concomitants of reading comprehension. Some literature describing WISC subtests discriminating disabled readers is reviewed.

RICHMAN, LYNN C. Language variables related to reading ability of children with verbal deficits. *Psychology in the Schools,* April 1979, *16,* 299-305.

Analyzes the performance of eighty-five children in second through fifth grades with low verbal/high performance WISC profiles on cognitive tasks which require verbal reception or verbal mediation strategies, but not vocal response. Dependent variables were assessed with the *Peabody Picture Vocabulary Test* (PPVT) and the *Hiskey-Nebraska Test of Learning Aptitude,* which measures verbal mediative (labeling, categorization, concept formation) without verbal expression. Pupils were divided into five WRAT reading levels ranging from one and one-half year above grade placement to one and one-half year below. Statistical significance in full scale IQ obtained between the above grade level readers and those average or below placement readers as did verbal mediation performance on the *Hiskey-Nebraska.* Correlation coefficients reported with *Wide Range Achievement Test* reading were WISC Verbal IQ = .52, WISC Performance = .56, WISC Full Scale = .65, PPVT = .54, and Hiskey = .83.

SABAROFF, ROSE E., & FRARY, ROBERT B. Error analysis of test items with respect to cognitive style: implications for teaching, *Reading Improvement,* Fall 1978, *15,* 215-225.

Suggests that an analysis of test errors revealing cognitive style can provide clues for reading instruction. Subjects were 126 third grade rural Appalachian pupils. Reading variables consisted of performance on word knowledge, word analysis, and reading comprehension subtests of the 1971 *Metropolitan Achievement Tests.* Investigator constructed cognitive style tests were individually administered to assess impulsivity, field dependence, conservation (Piaget), and categorization (Piaget). Varimax rotated factor matrices were formed for the reading tests and cognitive style variables. Specific types of reading test errors and subtest proficiency were detected for impulsive, field-dependent, and nonconserving children.

SPIEGEL, MONA R., & BRYANT, N. DALE. Speed of processing information related to intelligence and achievement. *Journal of Educational Psychology*, December 1978, *70*, 904-910.

Uses ninety-four sixth graders as subjects and correlates speed of processing information on tasks of varying levels of difficulty with *Lorge-Thorndike* intelligence scores and *Stanford Achievement Test* scores in reading and mathematics. Mean response time correlated significantly with IQ (-.6), with reading comprehension (-.5), and with mathematics computation (-.4). The highest coefficient reported for reading comprehension was with verbal IQ (+.76).

THOMPSON, BRUCE; ALSTON, HERBERT L.; CUNNINGHAM, CLAUDE H.; & WAKEFIELD, JAMES A., JR. The relationship of a measure of structure of intellect abilities and academic achievement. *Educational and Psychological Measurement*, Winter 1978, *38*, 1207-1210.

Correlates scores from the Meeker *Structure of Intellect Learning Abilities Test* (SOI) with results from the *Iowa Tests of Basic Skills* for a sample of 145 fifth and sixth grade pupils. Nine of the twenty-four SOI abilities hypothesized to be related to reading performance did so moderately (R = .59), and seventeen SOI scores correlated with arithmetic achievement (R = .83). Some SOI abilities presumed to be arithmetic related were found to correlate more highly with reading performance than those presumed to be reading success predictors.

HUMPHREYS, LLOYD G. Doing research the hard way: substituting analysis of variance for a problem in correlational analysis. *Journal of Educational Psychology*, December 1978, *70*, 873-876.

Contends that correlational analyses of data will provide more powerful tests of hypotheses. Critiques the data analysis of a study involving reading achievement and reanalyzes the data from that study in order to demonstrate his points.

BONYNGE, THOMAS T. Piaget and reading. In Malcolm P. Douglass (Ed.) All things considered ... reading, the process of creating meaning for sensed stimuli. *Claremont Reading Conference 41st Yearbook*, 1977. 94-103.

Presents some Piagetian ideas that bear upon the subject area of reading. Includes references to some research on reading that incorporates Piagetian concepts.

WALLER, T. GARY. *Think first, read later! Piagetian prerequisites for reading*. Newark, Delaware: International Reading Association, 1977.

Hypothesizes that thinking is fundamental to and necessary for reading. Points out the relevance of Piagetian theory for reading and examines evidence for the relationship between thinking, as viewed by Piaget, and reading.

Gallagher, Jeanette McCarthy. Problems in applying Piaget to reading, or letting the bird out of the cage. *Journal of Education,* Winter 1979, *161,* 72-86.

Evaluates applications of Piagetian theory to the process of reading and learning to read. Suggests that psycholinguistic research in reading is more "Piagetian" than some past attempts to apply Piagetian theory to reading.

Freeman, Evelyn B., & Wolfgang, Charles H. A Piagetian view of reading readiness, *Reading World,* October 1978, *18,* 72-80.

Establishes a theoretical perspective to beginning reading processes in terms of Piaget's ideas regarding representational thinking. Empirical research is cited to support the usefulness of this viewpoint.

Stewart, David W. & Morris, Linda. Intelligence and academic achievement in a clinical adolescent population. *Psychology in the Schools,* October 1977, *14,* 513-518.

Correlates by means of three canonical variate analyses the scores obtained by 182 adolescents referred to a state hospital for emotional diagnosis. Measures employed were drawn from the *Wide Range Achievement Test* (WRAT), the *California Achievement Test,* and either the WISC or WAIS. A large general variate emerged in all three analyses, which was substantially loaded by subtests of the WRAT and CAT. A second variate was bipolar with positive loadings for arithmetic subtests and negative loadings for language subtests. A third variate emerged with positive language subtest loadings and negative reading and spelling subtest loadings. Addition of WISC or WAIS scores produced one variate described as attentional and another described as symbol usage.

IV-4 Modes of learning

Cunningham, Mitsuko Mitzi. Perceptual ability and associational learning in normal and learning disabled children. *Perceptual and Motor Skills,* December 1978, *47,* 1200.

Tests the hypothesis that children learn more effectively through their preferred modality. The sample consisted of forty-four 7-9-year-olds of both sexes. High visual/low auditory and high auditory/low visual groups were formed on the basis of two perceptual tests (the *Developmental Test of Visual-Motor Integration* and *Lindamood Auditory Conceptualization Test*). Within each group subjects were divided into Wide Range Achievement Test performance groups: grade level or above and six or more months below grade placement. The experimental task consisted of learning paired associates. No significant differences held between performances of reading ability groups. Performance was consistent with direction of preferred modality for the visual group.

Smith, Clarissa K.; Everett, Frances L.; & Westendorf, David H. Word recall as a function of bisensory and unisensory split-span task presentation and modality preferences. *Perceptual and Motor Skills,* October 1978, *47,* 539-546.

Investigates the effects of visual and auditory modality preferences on word recall in bisensory and unisensory split-span tasks with seventy-two college subjects. Results indicated that modality preferences were generally unrelated to performance in the experimental conditions. Modlaity preferences are discussed as response biases rather than avenues to increased processing capacity in human subjects.

DeBoth, Carol J., & Dominowski, Roger L. Individual differences in learning: visual versus auditory presentation. *Journal of Educational Psychology,* August 1978, *70,* 498-503.

Investigates interactions of individual differences in learning with mode of presentation with 160 college students. Each subject learned four test lists of twenty words each, two under auditory presentation and two under visual presentation. Analyses indicated that individual differences in learning were reliable and that such differences were just as predictable across modalities as within modalities. A complementary analysis showed that subjects could not be reliably classified with regard to auditory/visual preference scores. No support was revealed for the contention that subjects can be classified as auditory or visual learners.

Rae, Gordon. Auditory-visual integration, sex, and reading ability. *Perceptual and Motor Skills,* December 1977, *45,* 826.

Reanalyzes data from a prior study that examined the relationship among auditory-visual integration, reading comprehension, and nonverbal intelligence with eighty-one boys and eighty-four girls at grade 5. For boys, the coefficient of correlation between integration and reading was .55; between IQ and integration, .61; and between IQ and reading, .57. Values for girls were .56, .75, and .75, respectively. All correlations were significant. First-order partial correlations were computed to determine the stability of the integration-reading correlations when the effects of IQ were controlled. All relationships were smaller, but remained significant.

Engle, Randall W., & Durban, Elizabeth D. Effects of modality of presentation on delayed recognition. *Perceptual and Motor Skills,* December 1977, *45,* 1203-1210.

Examines the effects of modality of presentation on delayed recall of words with seventy-two college subjects. Subjects were presented 240 high frequency words in twenty memory lists either visually with a projector or auditorily over headphones. The delayed recognition test consisted of all 480 words from the original word pool; free recall was also measured. For those lists paired with the immediate free recall test, auditory presentation was superior on the immediate test. On the delayed recognition test the tested lists led to higher performance than non-tested lists. For tested lists, auditory presentation led to superior recognition for the terminal serial positions, while for non-tested lists visual presentation led to higher performance on the last few positions.

Plas, Jeanne. Modality of presentation and learning disabled and normal pupils' word recognition skills. *Journal of Research and Development in Education, 9,* Monograph 1976, 14-17.

Attempts to determine if modality of presentation affects the recognition of upper and lower case words by learning disabled (LD) and normal children. Subjects were exposed to one of three treatments: 1) exposure to stimuli through the auditory modality only, 2) exposure to each letter of a given sequence visually, and 3) both visual and auditory exposure to each letter of a sequence. In addition to upper and lower case presentation, the nonsense words were of two-syllables and of high and low pronounciability. Normal subjects performed better than LDs for one and two-syllable words, for high- and low-pronounciability, and for upper and lower case presentation. However, the use of both visual and auditory stimuli concomitantly produced better results than if only one modality was used only in the instance of low pronounciability for normal subjects.

Hall, Kathryn V.; Irwin, Betty C.; & Murphy, Kathleen R. A comparison of audiovisual and written presentations in self-instructed learning. *Journal of Educational Research,* May-June 1978, *71,* 290-291.

Compares the learning efficiency of audiovisual presentations with written presentations utilizing sixty-six nursing students. Subjects were divided into two classes: in the first learning experiment, subjects in class 1 were shown a filmstrip accompanied by audio tape. Subjects in class 2 read the same content. One week later, the same procedures were used, except that new content was taught and subjects received instruction in the opposite mode. Time in instruction was the same for all groups across all treatments. Results indicated that listening along with the visual compent was superior to reading in one instance, but equivalent in the other.

Ciborowski, Tom. Rule learning, labeling, and media. *Perceptual and Motor Skills,* December 1977, *45,* 1252.

Studies the influence of labeling and presentation medium on the logical rule learning ability of forty-eight college students. Half of the subjects received pictorial stimuli and half received verbal descriptions of the identical stimuli. Twelve subjects in each media group were forced to respond overtly and verbally to the stimuli, while twelve simply received the stimuli. All subjects were given two disjunctive rule problems. The media variable was significant, indicating that pictures were easier overall than words. The labeling variable was not significant, but the interaction between media and labeling approached significance. In the labeling condition, pictures proved easier than words; in the pictorial condition, labeling proved easier than non-labeling.

Kazanas, H. C.; Stewart, Bob R.; & Lash, Neil A. Influence of reading ability and verbal modality on learning time. *Reading Improvement,* Summer 1978, *15,* 122-126.

Compares the effects of pictorial representation accompanied by visual-verbal or auditory-verbal information on learning time with fifteen high and fifteen low reading ability grade 10, 11 and 12 males. Subjects were randomly assigned to each group on the basis of scores on an unnamed standardized reading test. A learning unit was prepared in a vocational area by a task analysis procedure; the unit was comprised of slides and audio tape or slides and printed materials. Learning time was the dependent variable. The findings did not reveal a consistently significant effect upon learning time due to either format. However, when the mean learning times were examined, the aural-verbal mode consistently required less learning time than the visual-verbal format. High ability readers, as a group, required less learning time.

BROWN, R. MICHAEL. Visual and phonetic memory in preschool children. evidence for coding flexibility. *Perceptual and Motor Skills,* December 1977, *45,* 1043-1050.

Examines the ability of twenty-two preschool children to code visual items phonetically during input in a short term memory task. Items to be remembered were visually presented letters that varied in visual as well as phonetic similarity. Subjects labeled each letter during presentation and serial recall was probed either visually or verbally. The results indicated a significant detrimental effect of high phonetic similarity for subjects whose recall was probed verbally, a significant facilitating effect of high visual similarity, and significant interactions indicating differential effects of phonetic similarity and probe modality on the serial position curve.

BEECH, JOHN R. Effect of selective visual interference on visualization. *Perceptual and Motor Skills,* December 1977, *45,* 951-954.

Investigates the effect of selective visual interference on visualization with forty subjects. Subjects were assigned to either a reading or a listening group. In both instances, subjects were asked to respond when they had visualized in one whole image all the objects depicted by the words. Subjects who read the words exhibited a 10-fold increase in the slope of the latencies of wholistic visualization as a function of set size compared to that when subjects responded after listening to the descriptions of the objects. Males produced significantly steeper slopes than females in both the reading and listening conditions, indicating that they found visualization more difficult. Interference on the visualization task was, for the most part, disrupting active visual processing.

JUDGE, ROBERT [illegible] The effect of presentation mode and material difficulty on third and seventh graders' use of phonemic and semantic attributes to encode words into long-term memory (abstracted report). *Reading Research Quarterly,* 1976-1977, *12*(2), 190-203.

Investigates the use of the phonemic and semantic attributes of words for encoding verbal information into long-term memory among eighty third and seventh graders. Forty words having single grammatical functions served as the target items in the experimental task. Four passages for each grade were constructed so that two were written two reader levels below grade placement and two were written two levels above grade placement. Ten target words were embedded in each of four passages; before presentation of a passage, the ten items embedded in the passage were presented one at a time to each subject. After a subject read this passage silently or listened to it, another ten items were presented in isolation and then in context. Subjects in the visual condition were told to read the passages once silently and then to stop reading. Subjects in the oral condition listened to the passages as taped by a teacher. Four to six hours after presentation each subject in the visual condition was shown each target word paired with both a phonemic and a semantic distractor; each subject in the auditory condition was played a tape of each target word paired with both a phonemic and a semantic distractor. Both phonemic and semantic information were found to be used by both grades, but older subjects encoded to a greater extent on the semantic attribute. A trend was revealed indicating that greater phonemic storage occurred in the more difficult material and more semantic encoding occurred in the less difficult material. No differential encoding strategies due to presentation mode were discovered.

BUTTER, ELIOT J., & VALLANO, TERRY W. Auditory and visual cognitive styles and adult reading performance. *Perceptual and Motor Skills,* December 1978, *47,* 995-998.

Relates performance of forty undergraduates on an auditory impulsivity test and the *Adult Matching Familiar Figures Test* to the results of the *Nelson-Denny Reading Test.* Reported correlations for cognitive styles with the several reading scores were low positive or low negative, but significance was obtained between auditory reflectivity and comprehension scores. No significant relationships were found between reading measures and error or latency on the matching figure task.

MARCUS, LEE. Learning style and ability grouping among seventh grade students. *The Clearing House,* April 1979, *52,* 377-380.

Provides descriptive data in the form of percentage of response to the Dunn *Learning Style Inventory* for three tracks or qualitative levels of social studies classes (above average, average, below average). The author reports differences of individual patterns existing between and within the three ability groups in responses to the twenty-three subscales. Among the suggestive descriptive findings were that all groups revealed greater preference to learning alone than with adults or peers, below average groups revealed greater need for mobility, and the average group indicated greater dependence upon the teacher as motivator.

IV-5 Experiments in learning

MEYER, BONNIE J. F. The structure of prose: effects on learning and memory and implications for educational practice. In Richard C. Anderson, Rand J. Spiro, & William E. Montague (Eds.) *Schooling and* *the acquisition of knowledge.* Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1977. 179-200.

Focuses on the structure of prose, and presents a summary of the author's research investigating the effects of the structure of prose on what is remembered after reading or listening to passages.

CARTER, JOHN F. Comments on chapter 6 by Meyer. In Richard C. Anderson, Rand J. Spiro, & William E. Montague (Eds.) *Schooling and the acquisition of knowledge.* Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1977. 201-208.

Reacts to a presentation of research on the effects of prose structure on learning and memory. Research related to this topic is cited.

SPIRO, RAND J. Remembering information from text: the "state of schema" approach. In Richard C. Anderson, Rand J. Spiro, & William E. Montague (Eds.) *Schooling and the acquisition of knowledge.* Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1977. 137-165.

Believes that memory of textual information can be explained by a "reconstructive theory." Evidence includes citations of studies which used reading.

MOSENTHAL, PETER. Three types of schemata in children's recall of cohesive and noncohesive text. *Journal of Experimental Child Psychology,* February 1979, *27,* 129-142.

Investigates the ability of 150 second through fourth graders, varying in the types of schemata they utilized in recalling picture sequence materials. Subjects were judged to be above average readers on the basis of teacher ratings and the *Stanford Reading Test;* they were further classified as having theme-initial schemata, theme-final schemata, or no-theme structure schemata. Subjects were than required to recall several written text passages representing four different conditions: 1) theme first paragraphs, 2) theme final paragraphs, 3) paragraphs with no theme but having thematic structure, and 4) paragraphs with no theme and no thematic structure. The findings indicated that the manner and the amount of the childrens' recall were a function of how their schemata structure interacted with a given paragraph structure.

HOLLANDER, SHEILA K. The effect of questioning on the solution of verbal arithmetic problems. *School Science and Mathematics,* December 1977, *77,* 659-661.

Conducts a study of twelve sixth graders regarding the strategies they employed as they read and worked verbal arithmetic problems. Subjects scored between the fourth and sixth stanines on the Vocabulary, Comprehension, and Computation subtests of the *California Achievement Test Battery;* all evidenced IQ's of at least 90. Each student was presented with a 2-step sample problem, three experimental 2-step and three 3-step problems. Subjects were asked to explain what they were doing and to give their reasons for each choice of numbers and computational process they had employed for each problem. A series of questions was asked of each student upon problem completion to get at these processes. Questioning subsequent to the completion of the written solution to a problem appeared to encourage 75 percent of the subjects to change either the computational process or numbers they had employed. Although 60 percent of the attempts which were altered resulted in incorrect solutions, 40 percent of the behaviors initiated subsequent to questioning resulted in correction. Implications for teaching are discussed.

RICKARDS, JOHN P., & DENNER, PETER R. Depressive effects of underlining and adjunct questions on children's recall of text. *Instructional Science,* January 1979, *8,* 81-90.

Studies the effects on recall comprehension of interspersed postquestions and underlining among sixty-nine fifth graders. Experimental subjects were given conceptual postquestions after every paragraph of text; controls were administered no postquestions. Additionally, experimentals either generated their own underlining of one sentence per paragraph, received text with topic sentences underlined for them, or were given text without underlining of any kind. Results indicated that the readers preponderantly chose for underlining subordinate, passage details rather than superordinate, conceptual material, even when given conceptual postquestions focusing on the topic sentences. Recall of passage details was most depressed when subjects were provided with both underlining and conceptual postquestions.

GALL, MEREDITH D.; WARD, BEATRICE A.; BERLINER, DAVID C.; CAHEN, LEONARD S.; WINNE, PHILIP H.; ELASHOFF, JANET D.; & STANTON, GEORGE C. Effects of questioning techniques and recitation on student learning. *American Educational Research Journal,* Spring 1978, *15,* 175-199.

Examines the effects of questioning techniques and student recitation on the learning of 707 sixth graders in two experiments. Ten ecology lessons involving reading/viewing of curriculum material plus a teaching treatment were given students. Treatments varied according to presence-absence of recitation and presence-absence of follow-up questioning and redirection. Subjects were given the reading comprehension subtest of the *Comprehensive Test of Basic Skills,* a general Information Test, an Essay Test, an Oral Test, a Transfer Text, and a Word Association Scale. Experiment 2 followed the same design except that the treatments varied presence-absence of recitation and percentage of higher cognitive questions within recitations. In both experiments, recitation substantially improved learning, particularly information recall and higher cognitive responding. Probing and redirection in Experiment 1 had no effect on learning. In Experiment 2, recitations with 50 percent higher cognitive questions were the least effective in promoting information recall, relative to recitations with 25 percent or 75 percent higher cognitive questions.

WIESENDANGER, KATHERINE DAVIS, & WOLLENBERG, JOHN PAUL. Prequestioning inhibits third graders' reading comprehension. *The Reading Teacher,* May 1978, *31,* 892-895.

Examines the effect of the use of prequestions on comprehension among ninety third graders. Subjects were asked to read passages varying in grade level from 3 to 6. Prior to reading, subjects were read two inferential level questions, two literal level questions, or no questions were given. Following reading, subjects responded to four comprehension questions read by the examiner, two of which had been included in the questioning treatment. Findings revealed that control subjects who received no prequestions achieved the highest scores, while the group receiving inferential prequestions achieved significantly higher reading comprehension scores than did the experimental group receiving factual prequestions.

SAGARIA, SABATO D., & DIVESTA, FRANCIS J. Learner expectations induced by adjunct questions and the retrieval of intentional and incidental information. *Journal of Educational Psychology,* June 1978, *70,* 280-288.

Reports a study of the effect of interspersed adjunct questions on the comprehension of 150 college subjects. Subjects read an 800-word passage; in experimental conditions where adjunct questions were included in text, subjects were asked to rewrite the questions to insure equivalency of attention. Following the passage, subjects responded to a 40-item comprehension test. Intentional performance in the prequestion treatment was lower than in the postquestion or combined question treatment, but higher than performance in the no question treatment. Incidental performance was lowest in the prequestion treatment and equal in other treatment conditions. Total level of acquisition was highest in those treatments involving the use of postquestions and no questions. Results are discussed relative to the effect of adjunct questions on learner expectations.

BRITTON, BRUCE K.; PIHA, ALAN; DAVIS, JOHNNY; & WEHAUSEN, ELLEN. Reading and cognitive capacity usage: adjunct question effects. *Memory and Cognition,* March 1978, *6,* 266-273.

Tests the hypothesis that the more cognitive capacity subjects use for processing reading material, the slower will be their reaction to other stimuli. A total of 120 college students were studied in two experiments. During reading of a 27-page passage, text-relevant inserted questions, irrelevant questions, or no questions were answered by subjects. Results indicated that subjects' use of cognitive capacity increased when text-relevant questions began, but not when irrelevant questions began or when no questions were given. The increase in cognitive capacity usage was greatest on text pages immediately following questions.

RICKARDS, JOHN P. Type of verbatim question interspersed in text: a new look at the position effect. *Journal of Reading Behavior,* Spring 1976, *8,* 37-45.

Analyzes the effect of two types of verbatim interspersed questions on the comprehension of textual material among forty-five college subjects. Verbatim adjunct questions were developed from sentences rated as low or high in importance to the overall meaning/structure of the experimental passage. Adjunct questions were then developed for a high-rated and a low-rated structural importance sentence in each paragraph of a 16-paragraph passage. Subjects were then provided with high or low structural importance questions either before or after related text paragraphs. In addition, a control group read the passage without any adjunct questions. The high structural importance pre- and postquestion groups were equal in recall of the questioned statements, and both groups outperformed the reading only control group. However, subjects who were given low structural importance prequestions recalled more questioned material than those who received low structural importance postquestions, and, in the present instance, only the prequestion treatment surpassed the control condition. Further, low structural importance prequestions depressed incidental recall below that of the controls. Thus the author concluded that rote learning questions did not generate any incidental learning and that retention on post- and prequestions varies with the types of adjunct questions.

PROSSER, G. V. The role of relevant active questions in learning based upon successive presentations. *Instructional Science,* October 1978, *7,* 359-383.

Examines the effects of relevant active questions as opposed to active and provided questions on the comprehension of forty-eight middle school children. Subjects were assigned to three treatment groups, matched for sex and verbal ability. The active question group was instructed to generate questions about the reading materials themselves. The provided question group wrote questions to answers provided by the experimenter. The relevant active group wrote their own questions, then checked a list of experimenter's answers to identify those which answered their questions and underlined the questions not answered. In short term comprehension, active questions were found to give greater help than questions provided by the xperimenter on the first presentation; relevant active questions were found to give the greatest improvement between the first and second presentations. Overall, provided questions were found to be the most helpful. In long term comprehension, however, both types of active questions proved to be as effective as provided questions. For low ability boys, the difference between treatments was small, even in the short term; under the relevant active questions treatment, the number of questions asked was greater.

MAYER, RICHARD E. Advance organizers that compensate for the organization of text. *Journal of Educational Psychology,* December 1978, *70,* 880-886.

Investigates in two experiments the effects of advance organizers on logically and poorly organized tests. In Experiment 1, fifty-six college subjects read a 24-frame text on computer programming that was presented in logical or random order. In the random organization sequence, subjects given an advance organizer did better on a posttest than did controls, but opposite results were found for logical organization. For Experiment 2, ninety-six subjects read a 4-paragraph text containing imaginary countries that was presented in name or attribute organization. Low ability subjects given an organizer prior to reading did better on questions that required integrating across different paragraphs of the text; subjects given the organizer after reading appeared to do better on questions concerning information they had read within the same paragraph.

RICKARDS, JOHN P., & DENNER, PETER R. Inserted questions as aids to reading text. *Instructional Science*, July 1978, *7*, 313-346.

Reviews research on the use of adjunct questions during reading in light of both behavioristic and cognitive views of learning.

ANDRE, THOMAS, & WOMACK, SANDRA. Verbatim and paraphrased adjunct questions and learning from prose. *Journal of Educational Psychology*, October 1978, *70*, 796-802.

Examines the performance of 210 undergraduates when reading 5000-word passage divided into twelve semantic segments for three adjunct question-related experimental comparisons: verbatim vs. paraphrased questions, text inserted or massed at end of passage, with or without review opportunity. Three control groups were used: passage without questions and immediate posttest, posttest without passage, passage search for posttest answers. Criterion was performance on immediate posttest of passage content. Significant differences were found in favor of text review, inserted questions, and verbatim questions. Interaction between effects also were significant. Highest mean correct responses were obtained for inserted paraphrased questions with opportunity for review. Control condition of passage-retention-test-review produced mean scores superior to all but one experimental condition, that of the inserted paraphrased question with review.

RICKARDS, JOHN P. Adjunct postquestions in text: a critical review of methods and processes. *Review of Educational Research*, Spring 1979, *49*, 181-196.

Reviews four methods for assessing mental processes produced by adjunct postquestions for prose.

REYNOLDS, RALPH E.; STANDIFORD, SALLY N.; & ANDERSON, RICHARD C. Distribution of reading time when questions are asked about a restricted category of text information. *Journal of Educational Psychology*, April 1979, *71*, 183-190.

Investigates with forty-three college students the distribution of reading time dependent upon question and information categories utilized in testing. Subjects read a specially prepared text either with or without inserted questions. The text and questions were presented on a computer terminal to allow measurement of reading times on short segments of material. Question groups performed better, relative to controls, on posttest items that repeated inserted questions and also on new posttest items from the same categories as the inserted questions. Although there was no overall reading time difference between the question and no-question groups, subjects who received inserted questions spent more time on the parts of the text that contained information of the type needed to answer the questions.

RUBIN, DAVID C. Very long-term memory for prose and verse. *Journal of Verbal Learning and Verbal Behavior, October 1977, 16,* 611-621.

Analyzes psychological processes utilized in very long term recall of memorized prose and verse among 118 college and ninety-four fifth and sixth grade students in three experiments. Memorized passages tested included Hamlet's soliloquy, "The Preamble to the Constitution," and "The 23rd Psalm." Subjects' recall of these passages was measured. Unlike passages learned in a lab setting, the recalls, while partial, were exact with no evidence of constructive memory. Although there was no control over learning, practice, or retention interval, the data were extremely regular. Function word, first letter, and music prompts increased recalls while they decreased a marked primacy effect evident in the free recall data. Free recalls obtained from fifth and sixth graders resembled the adult data. Recalls tended to begin and end at breath pause locations. The results were found to fit a simple model of associative chaining retrieval of passively stored surface structure units.

GAGNE, ELLEN D. Long-term retention of information following learning from prose. *Review of Educational Research,* Fall 1978, *48,* 629-665.

Discusses some factors that have been proposed to be necessary for the long-term retention of information learned from prose, and reviews available studies in light of these factors.

MCKENNA, MICHAEL. Cumulative interference of incorrect cloze responses. *Reading Improvement,* Fall 1978, *15,* 172-174.

Employs a 50-item every-fifth-word deletion cloze test which was administered to thirty undergraduates. Subjects were partitioned into high/low performance groups on the basis of accuracy on the first thirty-five items. The last fifteen cloze items were readministered after a delay of a week. Significant improvement was recorded by both groups. Results suggest subject recall tended to be misled by errors on cloze tests.

DUCHASTEL, PHILIPPE C. Retention of prose materials: the effect of testing. *The Journal of Educational Research,* May/June 1979, *72,* 299-300.

Tests students on passage they had just completed reading to determine the effect on delayed retention. The 750-word passage employed contained a total of thirty ideas grouped into ten topic paragraphs. Subjects were sixty-nine British high school students, mostly 14 and 15 years old. Half of the students were given a test consisting of three subtests (summary, free recall, and short answer) immediately after reading the science passage, while the other half were not tested then. All subjects took the test two weeks later. Differences between the two groups were significant for all three subtest scores.

Cornish, I. M. Memory for prose: quantitative analysis of recall components. *British Journal of Psychology,* May 1978, *69,* 243-255.

Reports a study of quantitative factors operating in the recall of prose materials for eighteen college subjects. A controlled set of nine passages was specially written and administered over three test sessions to subjects. Two analytic schemes were used to describe the reading materials; one based on clauses, and the other used actual words to split reproduced material into verbatim, non-verbatim, and intrusive components. Most of the variations in quantity of material recalled were a result of variations in the verbatim component only, whether associated with inter- or intra-individual differences.

McFarland, Carl E. Jr., & Rhodes, Deborah D. Memory for meaning in skilled and unskilled readers. *Journal of Experimental Child Psychology,* April 1978, *25,* 199-207.

Analyzes memory ability of 148 third, fifth, and seventh graders for words presented in list form. The total sample was classified as skilled or unskilled readers based on teacher evaluations of students' reading achievement levels. One group rated each word from the word list as "good" or "bad" (incidental semantic task), another group generated rhyming words for each list word (incidental rhyming task), and a third group attempted to memorize the list (intentional learning task). The recall results indicated equivalent recall for skilled and unskilled readers at all grade levels on the rhyming and intentional tasks: however, skilled readers were superior to unskilled readers on the incidental semantic task. Additionally, skilled readers tended to cluster semantically-associated words together during recall more readily than unskilled readers. The results are discussed relative to reading skill differences attributable to the semantic encoding of individual words.

Blumenthal, Gary B., & Robbins, Donald. Delayed release from proactive interference with meaningful material: how much do we remember after reading brief prose passages? *Journal of Experimental Psychology: Human Learning and Memory,* November 1977, *3,* 754-761.

Reports on three experiments treating variations of the influence of topic change upon the immediate and delayed recall of information in brief prose passages. Sixty undergraduate subjects were randomly assigned to groups. Criterion testing consisted of paraphrasing verbatim recall, and multiple-choice questions. The intervening condition consisted of crossword puzzle work. Specific results vary with the conditions of the experiment. In general, little difference among four immediate trials and retention occurs unless change of topic is introduced. Less retention loss was revealed for topic change condition.

May, William W.; Fox, Paul A.; Deni, James R.; & Schneider, Henry G. Learning from prose in grade school children: similarity versus identity of context clue. *The Journal of General Psychology,* April 1979, *100* (second half), 237-242.

Examines specific transfer of learning effects as a function of context clue similarity from study list to test list among sixty second, fourth, and sixth graders randomly selected from intact classes and randomly assigned to treatments. Subjects received identical clues between the study and test list in treatment I and similar clues between lists in treatment II. Results showed that the sixth graders outperformed the second graders, but no other between group differences were found. Although no treatment effects were found for second graders, the clue identical treatment was superior to the clue similar condition for the fourth and sixth graders.

VAN BLARICOM, GINGER. The effect of passage organization on main idea comprehension at three response levels. In Clifford Pennock (Ed.) *Reading comprehension at four linguistic levels.* Newark, Delaware: International Reading Association, 1979. 62-73.

Investigates the effects of types of main idea questions and the presence of passage organizers on main idea performance of sixty grade 3 and grade 4 children. Subjects scored at 3.0 grade level or better on the Reading Comprehension subtests of the *Stanford Achievement Text.* Twenty passages were developed for use in the study; ten had no organizer, i.e., topic sentence, while topic sentences were added to the other ten identical passages. Three questions testing general topic, title, and main idea statement recognition were written for each passage. The topic question required a one- to 3-word general response to the main idea of the passage. The title question asked for a topic plus a qualifier. A summary of all the details in the form of a complete sentence was required in the main idea statement question. Incorrect answer choices to each question were based on details in the passage. Subjects were given ten different passages, five with and five without organizers. Question type was significant for both grades. Overall mean response was greater for passages with organizers than for those without, but the difference was significant for fourth graders only. The author concluded that paragraph organization may affect reading comprehension.

KING, DAVID J. The influence of passage repetition and presentation time on the learning of connected discourse. *Bulletin of the Psychonomic Society,* September 1978, *12,* 229-230.

Investigates the effect of repetition in factorial combination with three total presentation times for ninety college students asked to learn samples of connected discourse. Subjects were presented a 25-word passage under three conditions of repetition (one, two, or three repetitions). Subjects had either thirty, forty-five, or sixty seconds in which to learn the passage. For both learning time and trials to criterion, only the main effect of repetitions was significant.

BAKER, LINDA. Processing temporal relationships in simple stories: effects of input sequence. *Journal of Verbal Learning and Verbal Behavior,* October 1978, *17,* 559-572.

Uses three experiments to examine the effect of input sequence on memory for simple stories among seventy-seven college students. After reading stories in either time or flashback sequence, subjects were asked to decide about the underlying order of the occurrence of two events. Responses were consistently faster and more accurate on chronological sequences under three conditions of testing: 1) immediately after reading, 2) after a 10-second interval, and 3) after a 10-second filled interval. It was also shown that decisions about input order were easier than decisions about underlying order when the stories contained flashbacks. These data indicate that subjects based their responses on a memory representation which preserved the input sequence of events.

BOWER, GORDON H.; BLACK, JOHN B.; & TURNER, TERRENCE J. Scripts in memory for text. *Cognitive Psychology,* April 1979, *11,* 177-220.

Examines in seven experiments the way in which routine activities and knowledge are organized and used to understand and remember narrative texts with 344 college students. Two studies collected script norms wherein people described what goes on in detail during familiar activities. Subjects largely agreed upon the nature of the characters, props, actions, and the order of the actions. Other studies investigated memory for a text narrating actions from a script. Subjects tended to confuse in memory actions that were stated literally with unstated actions implied by the script. Subjects also preferred to recall script actions in their familiar order; a scrambled text that presented some script actions out of order tended to be recalled in canonical order. Additional results are reported.

RUBIN, DAVID C. A unit analysis of prose memory. *Journal of Verbal Learning and Verbal Behavior,* October 1978, *17,* 599-620.

Analyzes, in a series of seven experiments, memory for prose among 172 college students, sixteen eighth graders, and sixteen adult males. Four stories were divided into function word units; each unit was assigned dependent variable values determined by measures of gist, imagery, repetition, frequency of occurrence, serial position, grammatical connectedness, centrality in a propositional net, and subjects' intuitions of which units would be remembered. The independent variables were all statistically significant predictors of recall. Students' intuitions and gist were the best predictors of the more structured stories, while repetition and serial position were the best predictors of the less structured stories. Changes in the retention interval, subject population, and motivation level affected the amount recalled but had little effect on the rank ordering of the units from most to least likely to be remembered. Additional results are discussed.

BRITTON, BRUCE K. Incidental prose learning. *Journal of Reading Behavior,* Fall 1978, *10,* 299-303.

Studies the conditional influence of incidental tasks (induced judgments) and informed intentional recall upon the study time and recall for facts and conclusions of thirty-six undergraduates when task was reading three short passages. The incidental task condition was further divided into a conclusion justification sample. Accuracy of judgment of conclusions did not differ reliably among conditions. The incidental judgment with justification condition exceeded the other conditions in recall of facts, conclusions, and amount of study time. A significantly larger number of facts than conclusions were recalled under all conditions.

MILLER, RAYMOND B.; PERRY, FRED L.; & CUNNINGHAM, DONALD J. Differential forgetting of superordinate and subordinate information acquired from prose material. *Journal of Educational Psychology*, December 1977, *69*, 730-735.

Investigates with forty-four college subjects the construct validity of a recognition test based upon the structure of a prose passage while relating test data to theories of prose learning and the role of memory in prose learning. Subjects read a 1600-word prose passage after which half of the subjects took a recognition test dealing with the content of the passage, while the other half of the subjects performed an unrelated task. Following a 2-day delay, both groups were administered the recognition test. Results indicated that there were different rates of forgetting for superordinate and subordinate ideas in the passage. Performance on the multiple-choice measure paralleled those of previous studies utilizing free-recall measures.

HERNDON, MARY ANNE. An approach toward the development of a functional encoding model of short term memory during reading. *Journal of Reading Behavior*, Summer 1978, *10*, 141-148.

Presents a model relating short term memory, and encoding. Employs cognitive inspection to examine twenty-two paragraphs for determining success in cluster analysis to simulate encoding function in semantically similar paragraphs. Results suggest the use of such a cluster analysis may facilitate the investigation of cognitive components in the encoding processes during reading.

ORWIG, GARY W. Effects of verbal shadowing on the recognition of visually presented verbal and nonverbal information. *Educational Communication and Technology*, Spring 1979, *27*, 25-30.

Examines the recognition of verbal and nonverbal information among fifty-six graduate students and college faculty under verbal shadowing conditions. Subjects were presented concrete and abstract words and sentences and pictures both with and without verbal shadowing. The findings suggested that subjects exhibited a nonverbal memory system which appeared to function fairly independently of verbal distraction under some circumstances.

DELANEY, HAROLD D. Interaction of individual differences with visual and verbal elaboration instructions. *Journal of Educational Psychology*, June 1978, *70*, 306-318.

Examines the ability of forty-eight college students to learn lists of paired words under different response conditions. Subjects were presented lists of English/Malay words of both low and high imagery value with the instructions to learn the Malay words. One group was given the task under normal paired-associate learning conditions; a second group was asked to search for lexical or verbal relationships (e.g., familiar letter patterns represented in both words) among the words; in a third group, subjects were instructed to visualize two things interacting that would help them remember the words. The group receiving verbal elaboration instructions demonstrated more correct responses than the visual elaboration group for highly verbally fluent subjects; the reverse was true for subjects who were of low verbal fluency. Additional questionnaire results on learning strategies employed by subjects are reported.

WONG, BERNICE. The effects of directive cues on the organization of memory and recall in good and poor readers. *Journal of Educational Research,* September/October 1978, *72,* 32-38.

Describes two experiments treating the influence of directive cues upon the recall and clustering of verbal content. The subjects of both experiments consisted of ninety-six fourth and fifth graders in a suburban school district of Vancouver, B.C. Half of the sample was classified as learning disabled; i.e., normal range intelligence, reading one to two years below grade level with no sensory deficits or record of emotional disturbance. The stimuli consisted of printed words distributed across conceptual categories. Good and poor readers received these under cued (classification system) and noncued, and under timed and untimed conditions. Good readers recalled significantly more items and clustered significantly more items than poor readers. Cued presentation was significantly better than noncued for both groups. Timed-nontimed results were mixed.

CHOW, PETER C. P.; CURRIE, JANICE L.; & CRAIK, FERGUS I. M. Intentional learning and retention of words following various orienting tasks. *Bulletin of the Psychonomic Society,* August 1978, *12,* 109-112.

Investigates the effects of time of exposure and experimenter instructions on the ability of seventy-two college subjects to learn and recall a list of common nouns. Subjects were presented words in either a fast (4-second exposure with a 2-second interword interval) or a slow (8-second exposure with a 4-second interword interval) condition. Subjects were also presented questions for each word; question types required subjects to identify type case, rhymes, or word categories. Some subjects were instructed to learn every word after they had answered the corresponding question; other subjects were given instructions for semantic coding by generating adjectives that described the word or making context judgments about the word. Following the recall task, a recognition test consisting of 180 word list containing the sixty target words was administered; subjects were to identify the target words. Results indicated that a lack of processing time does not appear to underlie small effects reported previously for intentional learning instructions. Retention was enhanced only when ample processing time and/or a beneficial task was explicitly given to subjects.

RICHARDS, LARRY G., & HELLER, F. P. Recognition thresholds as a function of word length. *American Journal of Psychology,* September 1976, *89,* 455-466.

Examines the effect of familiarity and word length on visual recognition thresholds for words with thirty-seven college students in four experiments. Experiments 1 and 2 presented subjects with real words and nonsense words varying in familiarity and length. For unfamiliar words, increasing word length increased recognition thresholds; but for familiar words, no increase in recognition thresholds was observed with reference to increasing word length. In Experiments 3 and 4, a poststimulus mask was utilized in order to terminate iconic processing; this was viewed as a test of the entire class of theories of unit-by-unit word processing. The use of the mask did not alter the overall pattern of results evidenced in the first two experiments; however, recognition thresholds were elevated for familiar words. Thus, overall results suggested the absence of an effect of length for English words and the presence of a length effect for pseudowords. The authors argued that word recognition is not a letter-by-letter process but involves a holistic or whole perception mechanism.

BROWN, ANN L., & SMILEY, SANDRA S. The development of strategies for studying texts. *Child Development,* December 1978, *49,* 1076-1088.

Examines in three experiments the strategies of 315 fifth grade through college age subjects in studying and learning from textual material. College subjects, under various intentional learning instructions, displayed a clear diagnostic pattern; following extended study, they improved recall of important, but not unimportant, elements of text. Eleventh and twelfth graders conformed to the adult pattern, but fifth through eighth graders were not as efficient. Older students benefited from increased study time because they possessed the necessary knowledge concerning the importance of text segments to enable them to concentrate on the essential information. Age, however, was not the sole determiner of performance; some students at each age spontaneously adopted strategies of underlining or note-taking. Adoption of underlining and note-taking strategies correlated with mature reading as evidenced by patterns of information recall.

FRANSSON, A. On qualitative differences in learning: IV—effects of intrinsic motivation and extrinsic test anxiety on process and outcome. *British Journal of Educational Psychology,* November 1977, *47,* 244-257.

Analyzes the effects of intrinsic and extrinsic motivation on the reading comprehension of eighty-one college students. The stimulus article was judged relevant or irrelevant to sample subgroups in an attempt to control the level of intrinsic motivation. Test conditions were varied to increase ego-involvement and threat to self-esteem in one situation, while providing a supportive situation to other subgroups. Qualitative differences in learning were investigated relative to the various experimental subgroups created. Lack of interest in the text, efforts to adapt to expected test demands, and high test anxiety were all found to increase the tendency towards surface-processing and ineffective, reproductive attempts at recall. However, an adaptive approach allied to strong interest and low anxiety produced a high proportion of deep level approaches with good factual recall.

FASS, WARREN, & SCHUMACHER, GARY M. Effects of motivation, subject activity, and readability on the retention of prose materials. *Journal of Educational Psychology,* October 1978, *70,* 803-807.

Studies the interaction of student motivation, student activity, and readability on the comprehension of prose materials with 160 college students. Subjects were asked to read a prose passage and to take an exam on the content of the passage. Subjects received an easy or difficult version of the passage, were allowed or not allowed to underline key phrases while reading, and were either motivated or not motivated by payment of money. Results indicated that non-highly motivated subjects performed better on the easy version than on the hard version of the passage, underlining aided only highly motivated subjects, and underlining aided the subjects who worked on the hard version of the passage.

CUMMINS, JAMES, & DAS, J. P. Cognitive processing and reading difficulties: a framework for research. *The Alberta Journal of Educational Research*, December 1977, *23*, 245-256.

Cites research and other information on the relevance of the simultaneous/successive model of cognitive processing as a framework for understanding and remediating reading difficulties. The studies reviewed suggested that, for less fluent readers, successive processing accounts for more variance in reading scores than does simultaneous processing; however, the reverse is true for better readers. The article raises a number of research questions relative to the developmental interrelationships among reading performance, conceptual-linguistic skills and cognitive processing in both clinical and normal reading children.

ROTHKOPF, E. Z., & BILLINGTON, M .J. Goal-guided learning from text: inferring a descriptive processing model from inspection times and eye movements. *Journal of Educational Psychology*, June 1979, *17*, 310-327.

Studies textual inspection times and eye movements of 222 high school and college students in goal relevant and goal nonrelevant conditions of learning from text. Averaged group data indicated two inspection modes: relatively rapid inspection of incidental text and slow goal processing. Goal-relevant sentences resulted in over twice as many and longer fixations than incidental sentences. Relative goal processing time and goal achievements were positively correlated. Qualitative differences were observed in style of subjects' responses to task demands.

RYAN, FRANK L. Selected non-cognitive variables and student achievement in a high-level questioning environment. *Journal of Experimental Education*, Fall 1978, *47*, 46-51.

Investigates the influence of degree of high level questioning involved in instruction upon the scores obtained on a list of content understandings by seventy randomly assigned fifth- and sixth-graders. Noncognitive variables consisted of factors derived from Figert's dogmatism scale and the experimentor's version of a semantic differential attitude inventory. Reading achievement was employed as control for cognitive ability. The instructional condition varied in degree of pupil response involvement to interpretive questions implanted in nine lessons. Results indicate the student response involvement had little influence upon post-test performance. Reading achievement accounted for the larger variance of post-test scores.

Andre, Thomas. Does answering higher-level questions while reading facilitate productive learning? *Review of Educational Research,* Spring 1979, *49,* 280-318.

Reviews research on the effects of asking students questions at different levels of cognitive complexity during learning.

Humphreys, Michael S. Item and relational information: a case for context independent retrieval. *Journal of Verbal Learning and Verbal Behavior,* April 1978, *17,* 175-187.

Studies the probability of recognizing a member of a word pair versus recognizing a single word under varying degrees of word relatedness with 140 college students. A reanalysis of the results of an earlier study confirmed that the probability of failing to recognize both words in an intact study pair was not less than the probability of failing to recognize the two words in a rearranged pair. A second experiment further confirmed this finding. Results are discussed relative to assumptions regarding retrieval processes and the extent to which they are independent of context.

Tulving, Endel, & Watkins, Olga C. Recognition failure of words with a single meaning. *Memory and Cognition,* September 1977, *5,* 513-522.

Investigates the long term recall of twenty-four college students in recognizing single-meaning words after a 7-day retention interval. Subjects were randomly assigned to six groups of four subjects each and were presented with forty-eight phrase-word pairs which they were asked to remember. Immediate and delayed recognition and delayed recall were assessed. When overall levels of recognition were equated, the magnitude of the effect was the same as that observed with high-frequency words of multiple meanings in other experiments. It was suggested that encoding specificity is not limited to words that have several semantic senses.

Santa, John L.; Santa, Carol; & Smith, Edward E. Units of word recognition: evidence for the use of multiple units. *Perception and Psychophysics,* December 1977, *22,* 585-591.

Examines the recognition patterns for subsyllabic units in words with twenty-seven college subjects in three experiments. The three studies employed a variant same-different task wherein a one-syllable word and a probe were presented simultaneously, and subjects responded "same" if the probe was an integral subset of the word and "different" otherwise. Probes included single letters, doublets, triplets, and the whole word. The first experiment suggested that a variety of spelling patterns, as well as the whole word, served as units of processing. In particular, initial consonant clusters were processed as quickly as single letters, and only slightly faster than the whole words. Consonant strings were utilized in the second experiment, demonstrating spelling pattern effects with permissible strings as compared to nonpermissable strings. A third experiment indicated that the particular effective units depend upon task demands. The authors felt that their findings provided evidence for the use of multiple units of perception in a single task; i.e., subjects used single letters, specific letter clusters, and whole words as recognition units. The initial consonant cluster was most likely to serve as a perceptual unit.

KIRK, SANDRA; KAUCHAK, DON; & EGGEN, PAUL. The effect of cue specificity and locus on learning from graphical material. *Journal of Educational Research,* September/October 1978, *72,* 39-44.

Investigates the effect of general and specific learning cues on learning information contained in bar graphs among 156 college students. Subjects were randomly assigned to one of four conditions: the Specific Cue group was asked to answer a factual question about information contained in graphs; the General Cue group was asked to judge the validity of a generalization about graph information; the Overall Cue group was asked to judge the validity of an extended generalization about graph information that summarized the results of an experiment; and controls were asked to study the graphs. Posttests were administered that contained seven subtests designed to measure both general and specific inspection of the graphs. Results showed that specific and general cue groups scored higher on total scores and treatment groups scored better than controls on treatment specific scores.

KAUCHAK, DON; EGGEN, PAUL; & KIRK, SANDRA. The effect of cue specificity on learning from graphical materials in science. *Journal of Research in Science Teaching,* November 1978, *15,* 499-503.

Examines the effect of general versus specific cues on the ability of 143 fourth through sixth graders to comprehend information from bar graphs. Subjects were randomly assigned to one of three experimental groups; all groups were given reading passages describing four experiments on plant growth where the results of the experiments were presented in the form of bar graphs and not contained in the narrative. One group (specific cues) was provided a written cue which asked subjects to respond in writing to a specific question. A second group (general cues) was asked to describe in writing the results of the experiment. Controls were directed to note the results of the experiment. All subjects were administered a 20-item posttest on the information in the bar graphs. Only specific cues brought about higher test performance, suggesting that the textual cues only aided in obtaining information directly related to the cue and scanning behavior resulting in the learning of incidental information did not result.

BROWN, ANN L.; SMILEY, SANDRA S.; & LAWTON, SALLIE Q. C. The effects of experience on the selection of suitable retrieval cues for studying texts. *Child Development,* September 1978, *49,* 829-835.

Investigates the ability of 319 subjects, ranging in school placement from fifth grade through college undergraduates to select suitable retrieval cues (story units) and main ideas from tape played readings of two short stories. Approximately half of subject sample was tested over story recall. Results suggest that greater educational experience is related to selectivity of retrieval cues and level of story ideas. Investigators recommend caution in drawing conclusions about cue retrieval modes for any one task.

CRIST, ROBERT L., & PETRONE, JOSEPH M. Learning concepts from contexts and definitions. *Journal of Reading Behavior,* Fall 1977, *9,* 301-303.

Examines the efficacy of different teaching methods for teaching concepts with seventy college students. One group learned concepts (unfamiliar words) by pairing the representative words with their definitions. The second group learned through the analysis of each word as it appeared in one-sentence contexts. Two posttests were given both groups; one consisted of one-sentence contexts similar to those seen by the context group, while the other consisted of definitions seen only during training by the definition group. On the context posttest, the group that had seen only contexts did significantly better than the definition group. In addition, the context group did as well on the test of recall as the definition group when the controlling stimuli were the definitions not previously seen by the context group. The results indicated that the conceptual meanings of the words were best acquired via an analysis of contexts.

JOLLY, THOMAS. Mastery learning and reading. *Journal of Reading,* May 1979, *22,* 764-767.

Examines a seminal paper on mastery learning and considers two studies that illustrate applications of mastery learning to reading.

MORRIS, C. DONALD. Acquisition-test interactions between different dimensions of encoding. *Memory and Cognition,* July 1978, *6,* 354-363.

Examines the effects of changes in context on recognition memory in two experiments with eighty-one college students. In Experiment 1, target items were embedded in congruous or incongruous sentence frames and then tested in the original, new congruous, or new incongruous contexts. Experiment 2 included a third encoding condition: targets were embedded in abstract definitional sentences. Both experiments revealed a reliable crossover interaction between the initial encoding condition and the mode of the changed context. Congruous items were recognized better in new congruous contexts. Recognition of definitional items were equally impaired by both context changes.

HALL, JAMES W.; MISKIEWICZ, ROSEMARIE; & MURRAY, CHERYL GAY. Effects of test expectancy (recall vs. recognition) on children's recall and recognition. *Bulletin of the Psychonomic Society,* February 1977, *10,* 425-428.

Compares the performance of forty-eight third grade and forty-eight sixth grade pupils randomly selected on the recall and recognition of a list of words following practice conditions. Task difficulty judgments and method of study by subjects also were investigated. Numerous results of a 2 x 2 x 2 x 2 x 2 ANOVA are reported. Recall and recognition by sixth graders were superior to third graders on both practice and critical lists. Text expectancy influenced the recall of sixth graders. Sixth graders were more likely to use learning strategies other than repetitive reading.

Peeck, J.; Van Dam, G.; & Uhlenbeck, R. W. F. Incidental cues and picture/word differences in recall. *Perceptual and Motor Skills,* December 1977, *45,* 1211-1215.

Examines the ability of eighty college students to freely recall twenty objects presented in various conditions of verbal or picture format. Stimuli were presented as either normally printed words, words enriched with iconic sign characteristics, normal line drawings, or schematic line drawings constructed from a limited set of elements. Enriched words were better recalled than normal words, whereas differences in recall between the two types of line drawings failed to reach significance.

Duchastel, Philippe. Learning objectives and the organization of prose. *Journal of Educational Psychology,* February 1979, *71,* 100-106.

Examines the joint effects of prose structure and learning objectives upon content recall for 108 French female students, ages 17 and 18. Two experimental texts were utilized in the study, consisting of short passages wherein ideational prominence was experimentally manipulated. Such manipulation was found to lose its effect when relevant objectives were also provided. Objectives and structure were interpreted as providing redundant orientation in learning, the importance of each being determined by situational factors. Both orienting factors were also found to be little influenced by a time constraint examined in the study.

Zimmer, John W.; Glover, John A.; Ronning, Royce R.; & Petersen, Chris. On the utility of the Nelson-Denny reading test as a covariate in research on prose-processing. *Perceptual and Motor Skills,* April 1979, *48,* 641-642.

Reassesses the role of adjunct aids for processing prose. The 36-item comprehension section of the *Nelson-Denny Reading Test* was administered to 174 undergraduates prior to reading four randomly ordered 1500-word essays. Subjects were then divided into two groups of eighty-seven each with one group receiving adjunct processing aids for each essay and the other half not receiving such aid. Posttest data were collected on twenty-five items yielding a total score and intentional and incidental learning scores. *Nelson-Denny* scores proved significant indicators of performance on all three measures employed. The *Nelson-Denny* scores accounted for 16 precent of the variance on intentional scores and 34 percent of the variance on incidental scores. Pearson product-moment correlation coefficients between the *Nelson-Denny* and total score, intentional learning score, and incidental learning score were .61, .40, and .58, respectively.

Pratt, Donald F., & Goss, Albert E. Study and test formats in learning factual information. *Bulletin of the Psychonomic Society,* May 1978, *11,* 301-304.

Reports the results of a study of 192 college subjects in which subjects studied and learned information presented in a variety of formats. Four presentation formats were utilized: 1) a traditional prose format; 2) a constrained prose format in which variance of extraneous words was minimized; 3) a paired associate format in which patterns of stimulus-response relationships are realized by contiguous placement of stimulus and response terms; and 4) a tabular format using row and column headings to eliminate repetition even of stimulus terms. Criterion tests required subjects to reproduce or reconstruct missing items. Totals of correct reproductions or reconstructions did not differ among study formats and differed only slightly among test formats. Results are discussed with regard to theory and experimentation on meaningful versus rote learning and the apparent ineffectiveness of prose and study formats as variables in the process of information acquisition.

Mayer, Richard E. Effects of prior testlike events and meaningfulness of information on numeric and comparative reasoning. *Journal of Educational Psychology*, February 1978, *70*, 29-38.

Presents 160 college subjects with information in either equation or story form within reading passages in order to assess the effect of presentation format on comprehension. Subjects read four passages that each described quantitative relations among elements in a 4-term linear ordering and subjects then answered either only twelve numeric or twelve comparative questions following each passage. On the fifth passage, the target passage, where subjects received both numeric and comparative questions, subjects performed relatively better on the type of questions they had responded to previously. No differences were revealed between the groups in ability to make inferences. However, information stated as meaningful stories resulted in better performance on comparative questions and on inference, while information stated as nonsense equations resulted in the opposite trend. The author concluded that making inferences with quantitative and with nonquantitative data are different processes.

Christiaansen, Robert E.; Dooling, D. James; & Keenan, Thomas F. Prose retention: recognition test effects and style memory. *Bulletin of the Psychonomic Society*, June 1978, *11*, 383-386.

Examines the various types of memory for prose materials that operate concomitant to comprehension with 384 undergraduate college students. Subjects read a passage once, and shortly afterward were asked to make recognition judgments on three types of test sentences. The test sentences could be 1) identical to those read in the passage, 2) a paraphrase of a passage sentence, or 3) thematic to the passage but otherwise different from sentences in the passage. The order of percentages of sentences identified as having appeared in text were identical, paraphrased, and thematic. Test order effects were discovered for thematic test items. The three levels of responding indicated that sentence wording, sentence meaning, and passage theme were all represented in memory but were differentially retained. A final test for memory of style of passage yielded no significant effects.

Anderson, Dennis L., & Byers, Joe L. Effect of test items and degree of similarity upon interference in learning from prose materials. *Psychological Reports*, April 1978, *42*, 591-600.

Assesses the effect of retroactive interference on the comprehension of prose materials with forty college students. Subjects read a passage and were administered a 30-item test that measured literal and inferential comprehension. All subjects read an interfering passage twice and took a retention test after each reading. The original achievement test was administered again six weeks later. Results indicated that administering the test immediately after the original learning passage facilitated retention. Within the no-test condition, subjects who read an interpolated passage (interference passage) which was highly similar to the original passage had significantly fewer correct responses when tested immediately on information that was stated directly in the original passage.

HINSLEY, DAN A.; HAYES, JOHN R.; & SIMON, HERBERT A. From words to equations meaning and representation in algebra word problems. In Marcel Adam Just & Patricia A. Carpenter (Eds.) *Cognitive Processes in Comprehension.* Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1977. 89-106.

Investigates the influence of concomitant verbal material on the solving of algebraic word problems with thirty high school and college students in five experiments. In Experiment 1, subjects' ability to categorize word problems according to type of mathematical operation involved was tested. Eighteen categories of problems emanated from Experiment 1; there was a high degree of agreement among subjects regarding categories. In Experiment 2, subjects were read problem segments (clauses, phrases, etc.), one at a time, and were asked to categorize the problems they were read. Half of the subjects categorized the problems correctly after hearing less than one-fifth of the text. In Experiment 3, protocols were collected from students attempting to solve nine algebraic problems; the problems were operationally similar but differed in the superficial cover story accompanying them. Two strategies in word problem solving emerged from Experiment 3: reading the entire problem before formulating any equations or noting any relationships in particular, or a line-by-line approach where equations are formed and relationships noted *during* reading. Ability to correctly classify problem type was found to be related to problem solving ability. In two final experiments, ability to categorize nonsense problems and to make relevance decisions regarding information in word problems was investigated.

LUKATELA, G.; SAVIĆ, M. D.; OGNJENOVIĆ, P.; & TURVEY, M. T. On the relation between processing the Roman and the Cyrillic alphabets: a preliminary analysis with bi-alphabetical readers. *Language and Speech,* April/June 1978, *21,* 113-141.

Reports six experiments with 516 college students in which the relation, in processing terms, between two alphabets is studied. The Serbo-Croatian language utilizes, to varying degrees, two alphabets: Roman and Cyrillic. In general, the evidence accumlated in the six experiments indicates asymmetry in the way in which letters from the two alphabets are processed. Processing the letters of the first acquired alphabet is more similar to processing the letters of the second acquired alphabet than vice versa. Additionally, it was shown that searching for a letter in the other alphabet is faster than searching for a letter in the same alphabet, suggesting that alphabet categorization may precede letter identification.

LUKATELA, G.; SAVIĆ, M.; GLIGORIJEVIĆ, B.; OGNIJEVIĆ, P.; & TURVEY, M. T. Bi-alphabetical lexical decision. *Language and Speech,* April/June 1978, *21,* 142-165.

Reports three experiments with eighty-two college students in which the interaction of phonological and lexical characteristics of two alphabets are studied. The Serbo-Croatian language utilizes two alphabets: Roman and Cyrillic. Subjects were shown letter strings in the two alphabets, all of which could be given a phonological interpretation in Roman, but only some of which could be given a phonological interpretation in Cyrillic; additionally, some letter strings had lexical entries in either alphabet. Subjects were asked to decide, as quickly as possible, whether a given letter string was a word. Taken together, the experiments suggested that in the lexical decision task, Serbo-Croatian letter strings receive simultaneously two phonologic interpretations. Whether or not this phonologic bivalence impedes lexical decision in the assigned alphabet mode depends on whether or not the letter string has a lexical entry in at least one of the alphabets.

GLYNN, SHAWN M. Capturing readers' attention by means of typographical cuing strategies. *Educational Technology,* November 1978, *18,* 7-12.

Overviews research on the effects of typographical cuing systems in text on learning.

OMAGGIO, ALICE C. Pictures and second language comprehension: do they help? *Foreign Language Annals,* April 1979, *12,* 107-116.

Investigates the effects of selected pictorial contexts on measures of reading comprehension in beginning college French with 664 college students. The pictorial context variable consisted of six levels: 1) no visual context, 2) a single-object drawing, 3) prethematic context, 4) thematic context, 5) postthematic context, and 6) multiple context. Textual materials were in three levels: French, English, or no text. Text comprehension was measured by a resumé, to be written in English by subjects and a 20-item test of recognition. Results indicated that advantages in having illustrations in the second language accrued from the fact that the pictures served as advance organizers of a general nature, facilitating the hypothesis-testing process.

DUTTON, R. The mediation of three-dimensional visualization for isolinal graphics. *British Journal of Educational Technology,* October 1978, *9,* 211-216.

Explores the differences among several methods of teaching 3-dimensional forms with 100 11- and 12-year-olds. In a school based situation, subjects are often required to read 3-dimensional materials in two dimensions, for example, contour maps. Subjects were divided into two groups: the first received the contour maps and models, the second received only the 2-dimensional maps. Following study, a comprehension test was administered. Children in the maps and models group performed significantly better than their counterparts.

SCHVANEVELDT, ROGER W.; MEYER, DAVID E.; & BECKER, CURTIS A. Lexican ambiguity, semantic context, and visual word recognition. *Journal of Experimental Psychology: Human Perception and Performance,* May 1976, *2,* 243-256.

Tests the selective-access and nonselective-access hypotheses by examining the effect of prior semantic context on the way in which forty-eight college students access the meaning of ambiguous words. Subjects' task was to decide whether selected strings of letters were English words. The stimuli included test sequences of three words in which the second word had two distinct possible meanings, while the first and third words were related to these meanings in various ways. When the first and third words were related to the same meaning of the ambiguous second word (e.g., *save—bank—money*), the reaction time to recognize the third word decreased. But when the first and third words were related to different meanings of the second word (e.g., *river—bank—money*), the reaction time for the third word was not reliably different from a control sequence with unrelated words. Selective access to lexical memory is discussed relative to models of word recognition.

BISANZ, JEFFREY; PELLEGRINO, JAMES W.; KAIL, ROBERT V., JR.; & SIEGEL, ALEXANDER W. A biased test of the encoding shift hypothesis. *Developmental Psychology,* September 1978, *14,* 567-568.

Investigates the interaction among age, semantic encoding, and acoustic encoding with twenty-four 8-, 11-, and 20-year-olds. To avoid inferential problems in previous false recognition designs, a procedure was used to both control and bias the features encoded at the time of testing. Target words were paired with words related either semantically or acoustically in order to bias encoding in the direction of features common to both words. Recognition accuracy was found to improve with age when encoding was biased semantically relative to accuracy when encoding was biased acoustically.

LEY, RONALD. Encoding specificity and unidirectional associates in cued recall. *Memory & Cognition,* September 1977, *5,* 523-528.

Examines the utility of words as retrieval cues with 200 college students in two experiments. In the first experiment, words assessed as strong elicitors of target words under silent study encoding instructions were found to be effective extralist retrieval cues, whereas words assessed as weak elicitors were not. In the second experiment, predictions from the encoding specificity principle were confirmed with respect to the effectiveness of forward and backward retrieval cues in recall. Forward and backward unidirectional associates were equally effective as retrieval cues, provided subjects engaged in associative encoding at storage.

DAVELAAR, EILEEN; COLTHEART, MAX; BESNER, DEREK; & JONASSON, JON TORFI. Phonological recoding and lexical access. *Memory and Cognition,* July 1978, *6,* 391-402.

Reports the results of four experiments examining the effects of homophony on response latency in a lexical decision task among 133 college students. Findings indicated that an effect of homophony was evident only if the nonword distractors consisted of legal, pronounceable strings, but that this effect disappeared if the nonwords sounded like English words. The authors propose an optional encoding strategy to account for this differential effect and suggest that while both graphemic and phonemic encoding occur simultaneously, naive subjects tend to rely on the outcome of the phonological route. Additional results are discussed.

BARRON, RODERICK W., & HENDERSON, LESLIE. The effects of lexical and semantic information on same-different visual comparison of words. *Memory and Cognition,* September 1977, *5,* 566-579.

Investigates the effects of semantic similarity in words on same/different judgments with 150 college students in four experiments. In the first experiment, subjects were not any slower on semantically related than on unrelated different judgments even with a 3000-msec interval between the first and second word. In experiment 2, subjects based their judgments on whether or not the first letter of each word was visually identical. Same judgments were not any faster for semantically related than unrelated items. Experiment 3 showed that the word/orthographically legal nonword difference could be replicated with the first letter visual comparison task employed previously. Additional results with reference to the effects of lexical entry upon encoding are discussed.

SANTA, CAROL MINNICK, & SANTA, JOHN L. Vowel and consonant clusters in word recognition. *Perception and Psychophysics,* March 1979, *25,* 235-237.

Explores the performance of sixteen college students on an experimental task involving the matching of stimulus words conforming to three consonant-vowel arrangements. Mean latencies for correct different judgments in each of four probes are presented.

SINGER, MURRAY. Processes of inference during sentence encoding. *Memory and Cognition,* May 1979, *7,* 192-200.

Examines whether implicit instruments are computed and stored during sentence encoding with 143 college students in four experiments. Subjects read pairs of related sentences and indicated when they understood the second member in each pair. In Experiment 1, response times were longer for test sentences that, relative to the antecedent, mentioned implicit rather than explicit instruments. Experiment 2 revealed this difference to be stable over a range of reading times and two phases of practice. The results indicated that the inferences in question were not computed, or at most, were partially drawn during encoding. In Experiment 3, the procedure was employed to distinguish four degrees of relation between propositions and the inferences they permit. Experiment 4 examined the agent, patient, and instrument cases. It was shown that subjects require more time to verify both true and false inference tests than to verify their direct counterparts.

IV-6 Visual perception

JUOLA, JAMES F.; SCHADLER, MARGARET; CHABOT, ROBERT J.; & MCCAUGHEY, MARK W. The development of visual information processing skills related to reading. *Journal of Experimental Child Psychology,* June 1978, *25,* 459-476.

Assesses the proficiency with which a total of eighty subjects at various ages engage in a visual search task. Included in the study were twenty subjects from each of the following age/grade levels: kindergarten, second grade, fourth grade, and college/adult. The search task consisted of the visual presentation of a target letter followed by a 3-, 4-, or 5-letter display. The target letter was included in the display on half the trials, and the displays were comprised of common words, orthographically regular pseudowords, and irregular nonwords. While response times decreased with age, the three oldest groups showed similar effects for the size and structure of the displays. Response times increased linearly with the number of display letters, and responses were faster for word and pseudoword displays than for nonwords. Kindergartners utilized a different search strategy in which they did not differentiate among the various types of letter/word displays.

PIKULSKI, JOHN J. Critique: translating research in perception and reading into practice. In Frank B. Murray & John J. Pikulski (Eds.) *The acquisition of reading: cognitive, linguistic, and perceptual prerequisites.* Baltimore: University Park Press, 1978. 123-130.

Examines the gap between reading researchers and practitioners and between research and practice with special reference to the field of perceptual processes in reading. Related research is included.

PICK, ANNE D. Perception in the acquisition of reading. In Frank B. Murray & John J. Pikulski (Eds.) *The acquisition of reading: cognitive, linguistic, and perceptual prerequisites.* Baltimore: University Park Press, 1978. 99-122.

Argues that research on the perceptual components of reading suffers from lack of a conceptual analysis of the reading task that has ecological validity. Describes a number of perceptual models of reading and presents results of research.

ARNETT, JOHN L., & DILOLLO, VINCENT. Visual information processing in relation to age and to reading ability. *Journal of Experimental Child Psychology,* February 1979, *27,* 143-152.

Developmentally compares temporal integration and backward masking task responses of forty-eight good and poor male readers, ages 7, 9, 11, and 13. Poor readers were identified as those whose scores fell below grade placement on the *Stanford Achievement Test.* Good readers were identified as those with above grade level reading performance on the SAT. Results revealed no difference between groups in visual persistence or processing rate, but processing rate increased with chronological age of both levels of readers.

Johnston, James C. A test of the sophisticated guessing theory of word perception. *Cognitive Psychology,* April 1978, *10,* 123-153.

Examines, in two experiments, the efficacy of the Sophisticated Guessing Theory of Word Perception (EGT) with fifty-six high school and college subjects. The SGT assumes that as the degree of contextual constraint (surrounding letters) on the identity of a letter increases, accuracy of perception should increase. In Experiment 1, the effects of lexical constraint on the perceptibility of letters in short, 4-letter words was investigated. The perceptibility of the same letters in the same string positions, when they appeared in highly constraining word contexts and weakly constraining word contexts, was compared. Experiment 2 compared the perceptibility of letters in words, letters in unrelated letter strings, and single letters alone, using the same visual conditions and procedures as in Experiment 1. In Experiment 1, no effect was discovered regarding degree of constraining context. Experiment 2 showed that a strong perceptual advantage could be obtained for letters in words vs. letters alone or in unrelated letter strings. The existence of a higher-level perceptual code that is more resistant to degradation than the code formed for letters is discussed.

Wilson, Rose; Parker, Timothy; Stevenson, Harold W.; & Wilkinson, Alex. Perceptual discrimination as a predictor of achievement in reading and arithmetic. *Journal of Educational Psychology,* April 1979, *71,* 220-225.

Examines perceptual discrimination of letterlike forms among 410 pre-kindergarten children and its relationship to reading achievement. Subjects were administered a battery of perceptual discrimination tasks using letterlike forms and their transformations. Subjects were tested further at grades 1, 2, and 3 with the *Wide Range Achievement Test.* The magnitude of the relation to subsequent achievement in reading differed for different transformations, depending upon the difficulty of a transformation. More easily discriminated transformations were associated with higher correlations. The patterns of relation were similar for reading and arithmetic, suggesting that the perceptual discrimination test measured nonperceptual abilities related to early school achievement.

Park, Rosemarie. Performance on geometric figure copying tests as predictors of types of errors in decoding. *Reading Research Quarterly,* 1978-79, *14* (1), 100-118.

Compares consistent and differential performance between the *Beery Visual Motor Integration Test* and the *Bender Gestalt* for eighty-four second grade subjects reading one or more years below expectancy as determined by the *Gray Oral*. Three experimental tasks involved the identification of easily confused letters among distractor letters, the identification of words employing confusing letters read in isolation, and identification of confused letter words in sentences. When reading level was used as a covariate, no significant differences occurred between those scoring high and low on the *Beery-Bender* (geometric figure drawing) tests. Low *Beery-Bender* subjects made more errors when reading was not covaried. The high and low *Beery-Bender* subject performance on the tasks was not differentiated by context format presentation. The low *Beery-Bender* group contained more relatively poor readers.

STANOVICH, KEITH E.; WEST, RICHARD F.; & POLLAK, DENISE. The effect of orthographic structure on word recognition in a visual search task. *Journal of Experimental Child Psychology*, August 1978, *26*, 137-146.

Investigates the visual search performance of twenty-four third graders, twenty-four sixth graders, and twenty-four college students on tasks of identifying one word; a semantic category; or 3 words in lists of words, nonwords and pseudowords. Influence of orthographic structure was significant in searching for categories and three word targets. Use of orthographic structure to facilitate search did not increase with age of these subjects.

TRAVERS, JEFFREY R., & OLIVIER, DONALD C. Pronounceability and statistical "Englishness" as determinants of letter identification. *American Journal of Psychology*, September 1978, *91*, 523-538.

Examines the letter recognition ability of nine college students and the extent to which it is influenced by pronounceability. Eighty letter strings were presented to subjects varying in "Englishness" and pronounceability, as assessed by letter-cluster frequencies. "Englishness" was found to exert a significant effect on report accuracy, independent of string pronounceability.

GEYER, L. H. Recognition and confusion of the lowercase alphabet. *Perception and Psychophysics*, November 1977, *22*, 487-490.

Estimates a visual recognition confusion matrix for the full lower case English alphabet as determined by twenty-five tachistoscopic trials per letter for each of seven male adults with normal or corrected vision. Confusion performance, averaged across stimuli and subjects, was 0.50. Subject range for accuracy of performance was 40.8 percent to 55.7 percent. A letter-by-letter tabular matrix is presented.

FISHER, VIRGINIA LEE. Letter discrimination as a function of culture, orthography and dimensionality of letters. *Perceptual and Motor Skills*, April 1978, *46*, 459-464.

Investigates the effect of presenting letters in a 3-dimensional display on letter discrimination among forty-six American and eighty Indian children. Two-dimensional letters were mounted on cards. Kannada (Indian) letters and English letters were randomly presented in both modes to subjects. Results indicated that more errors were made on Kannada than on English orthographic tasks, but there were relatively fewer errors made by Indian than American children. Younger subjects and boys made relatively more errors than other groups.

Garner, W. R., & Haun, Forrest. Letter identification as a function of type of perceptual limitation and type of attribute. *Journal of Experimental Psychology: Human Perception and Performance*, May 1978, *4*, 199-209.

Examines error distributions in letter identification tasks with twelve college students in order to determine the influence of letter features and processing ability in letter identification. Letter features were defined by features that exist or do not exist or by dimensions that exist at some positive value. Process limitation holds that letter patterns are distorted. Under a state limitation, feature set errors are primarily produced by a loss of features, so that a letter with more features is called a letter with fewer features more often than not. It was found that the attribute structure derived from error distributions is not invariant across types of perceptual limitation, nor are distances between letter pairs always symmetric.

Reitsma, Pieter. Changes in letter processing in beginning readers. *Journal of Experimental Child Psychology*, April 1978, *25*, 315-325.

Reports a study of letter naming and letter detection with twenty-four first, second, and sixth graders. Letter pairs were tachistoscopically presented to subjects who were required to determine whether the letters had the same name; response latencies were recorded for each subject. A letter detection task was also presented wherein letter matching was either based on physical or name characteristics. Results indicated that name matching in both tasks was slower than visual form matching. The name/physical match differences changed significantly as a function of grade level. Children increasingly employed strategies of processing based on nominal cues and became efficient in extracting the invariant features of letters, even in the presence of irrelevant variations like type face.

Chiang, Chun. Gross vision of a word enhances the perceptibility of its component letters: a model. *Vision Research*, 1978, *18*, 1599-1600.

Utilizes previous research findings in building a quantitative model to explain the order of accuracy for recognizing letters in meaningful words and non-related words. The model states that minimum features required for recognition of the whole pattern is equivalent to or less than the total features required for its component patterns. In addition, the features extracted in vision are related to the feature density and the field of attention.

Allington, Richard L. The visual "confusability" of high-frequency words. *Journal of Learning Disabilities*, August-September 1977, *10*, 444-449.

Examines the ability of ninety first graders to correctly identify visually confusable high frequency words. The children were presented 120 words in a match-to-sample task; distractor words varied in their degree of confusability with the target word. Results indicated that the subjects had mastered this task to a high level of proficiency. Both mean and median scores were above the 90 percent level. Selected words accounted for a majority of the confusions.

POSNANSKY, CARLA J., & RAYNER, KEITH. Visual vs. phonemic contributions to the importance of the initial letter in word identification. *Bulletin of the Psychonomic Society,* March 1978, *11,* 188-190.

Examines the relative contribution of visual processing and phonemic recoding in determining the importance of the first letter in word identification with the adult subjects. Subjects were presented line drawings with varying amounts of interference built into the processing task; recognition latencies for word identification were recorded. Results indicated that subjects utilize both visual and phonemic processing; however, a stronger role for visual processing was revealed.

MASSARO, DOMINIC W.; VENEZKY, RICHARD L.; & TAYLOR, GLEN A. Orthographic regularity, positional frequency, and visual processing of letter strings. *Journal of Experimental Psychology: General,* March 1979, *108,* 107-124.

Discusses the background and a model for visual processing pertinent to four experiments concerned with discovering the psychologically relevant properties of orthographic structure within letter strings. Subjects consisted of college students in three experiments (N=10 to 58) and sixteen sixth grade pupils in another. Results vary with investigation, and observed differences are explained in terms of critical stages of visual processing. Orthographic structure effect was found in target search reaction time and accuracy, but target search RT was relatively insensitive to orthographic structure in the search of letter strings.

KRUMHANSL, CAROL L. Naming and locating simultaneously and sequentially presented letters. *Perception and Psychophysics,* September 1977, *22,* 293-302.

Examines recognition of letters presented sequentially or simultaneously to fifteen college students. Letter pairs were of varying levels of confusability and were presented to subjects for 75 msec. The retinal locus of presentation varied from trial to trial, and subjects both identified and located the presented letters. Identification accuracy was higher on nonconfusable than on confusable letter pairs in the simultaneous condition, but not in the sequential condition. Additional results are discussed.

BIEDERMAN, IRVING & TSAO, YAO-CHUNG. On processing Chinese ideographs and English words: some implications from Stroop-test results. *Cognitive Psychology,* April 1979, *11,* 125-132.

Using Stroop form tests, the color naming of letters or ideographs, the color reading of words, and the reading of black letters or ideographs was compared for sixteen English-speaking college students and sixteen native-speaking Chinese. Chinese subjects revealed the effects of markedly greater interference (poorer perceptual/cognitive performance) than English controls.

Carpenter, Patricia A., & Just, Marcel Adam. Linguistic influences on picture scanning. In Richard A. Monty & John W. Senders (Eds.) *Eye movements and psychological processes.* Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1976. 459-472.

Presents 1) a paradigm to investigate how people read and process negative sentences, 2) a model to account for response latencies in these tasks, and 3) individual small sample data supporting the use of eye fixations as a useful technique in such investigations. Results suggest that duration of fixation as well as locus may be employed usefully in the experimental study of reading comprehension.

Gupta, Raj; Ceci, Stephen J.; & Slater, Alan M. Visual discrimination in good and poor readers. *Journal of Special Education,* Winter 1978, *12,* 409-416.

Describes two studies (N=24 and 26) of match-to-sample discrimination tasks performed by 7-year-old English children of average IQ, but differentiated in reading performances on the *Burt Word Reading Test.* In experiment 1, subjects were presented with two visual discrimination tasks: the *Visual Discrimination and Orientation Test* emphasizing letter strings, and a modified version of the *Bender Gestalt* abstract figures. In experiment 2, subjects were exposed to three sets of stimuli: letter-like nonsense shapes, strings of letters, and pronounceable nonsense words. Results suggest match-to-sample tasks composed of unfamiliar visual forms are not differentiated by reading ability, but differences are found between good and poor readers when items to be matched are letters.

McIntyre, Curtis W.; Murray, Michael E.; Cronin, Carmody M.; & Blackwell, Scott L. Span of apprehension in learning disabled boys. *Journal of Learning Disabilities,* October 1978, *11,* 468-475.

Compares the influence of visual interference upon the forced-choice letter recognition (span of apprehension) for two groups of boys, 6 to 11 years old, of normal intelligence, twenty of whom were diagnosed as "learning disabled" by a multi-test battery and a matching sample of twenty normal progress learners. With no interference, apprehension span was equivalent between groups. Presence of visual noise reduced span more notably for learning disabled boys. Physical similarity of letter distractors did not distinguish between groups.

IV 7 Auditory perception and reading

McGovern, Jill E. Auditory perception: a review of the literature. *Academic Therapy,* March 1979, *14,* 445-460.

Summarizes the literature on auditory perception. Provides a lengthy table listing findings of many studies.

TALLAL, PAULA. Auditory perceptual factors in language and learning disabilities. In Robert M. Knights & Dirk J. Bakker (Eds.) *The neuropsychology of learning disorders: theoretical approaches.* Baltimore, Maryland: University Park Press, 1976. 315-323 & 469-521.

Cites results of several studies that indicate that the processing of rapidly occurring acoustic information is critically involved in the development and maintenance of language. Some reading research is included.

LYON, REID. Auditory-perceptual training: the state of the art. *Journal of Learning Disabilities,* November 1977, *10,* 564-572.

Delineates the issues in auditory-perceptual training. Includes reviews of studies on the relationship of auditory-perceptual skills to reading and on the effect of training in these skills on reading ability.

GROFF, PATRICK. Reading ability and auditory discrimination: a further consideration. *Academic Therapy,* January 1979, *14,* 313-319.

Replies to criticisms of previous comments on auditory discrimination and evaluates a study on auditory discrimination and reading ability.

POLLACK, CECELIA; NAHEM, JOSEPH; & KRIPPNER, STANLEY. Developing auditory perception skills in kindergarten children. *Academic Therapy,* September 1978, *14,* 73-80.

Examines the effect of auditory perceptual training on reading achievement among seventy-five kindergarteners. Subjects were given phonic-linguistic training via the teachers and sixth grade tutors. Experimental subjects were compared to 125 controls who received traditional reading readiness training with or without sixth grade tutors. All subjects were given pre- and posttesting in reading, aural discrimination, auditory blending, memory for digits, visual discrimination, and general perceptual ability. The experimental group demonstrated significantly greater gains than either control group in general reading ability and auditory blending. No differences were discovered among the groups with respect to aural discrimination, visual discrimination, or general perceptual ability.

BRADLEY, L., & BRYANT, P.E. Difficulties in auditory organisation as a possible cause of reading backwardness. *Nature* (London), February 23, 1978, *271,* 746-747.

Compares ninety normal and backward readers with reference to auditory organizational abilities. Poor readers were of normal intelligence, but retarded eighteen months or more in reading ability; they were compared to a group of normal readers of equivalent reading ability, but who were an average of three years younger. Subjects were then presented orally four monosyllabic words, one of which they were to identify as the word that did not share a sound in common. Nearly 92 percent of the backward readers made errors in this task and 85 percent made more than one error; only 53 percent of the normal readers made errors on this task, and only 27 percent made more than one error. These differences were most acute with respect to initial phonemes. Comparable differences were also demonstrated between the two groups on a rhyming task.

FINNEGAN, SHIRLEY D. Auditory skills and word-calling ability. *Academic Therapy*, January 1979, *14*, 299-312.

Analyzes test data obtained on 100 children from Kindergarten to grade 4 with respect to various auditory skills. The *Inventory of Auditory Skills* (IAS) utilized in the study was constructed around five levels of auditory skill ranging from echoic reproduction to calling phonemically regular nonsense words. Subjects were also administered the *Botel Word Recognition Test*. Findings indicated that thirty-four of the subjects were able to call 75 percent of the nonsense words. The total success score on each subtest of the IAS showed a steady linear increase on the continuum from beginning Kindergarten through beginning fourth grade.

SWANSON, LEE. Auditory recall of conceptually, phonetically, and linguistically similar words by normal and learning-disabled children. *Journal of Special Education*, Spring 1979, *13*, 63-67.

Compares the performance of ten first grade boys classified as learning disabled with ten nondisabled first grade boys on sequential and nonsequential recall of twenty-four monosyllabic words arranged by four classifications: phonetic, conceptual, linguistic, and control. Subjects had normal hearing and were closely matched for IQ, CA, and Wepman ADT scores. Learning disability was defined by South Carolina State Standards, and scores below the K-7 level of the *Wide Range Achievement Test* reading subtest. Normal progress subjects scored significantly higher on short term memory for both sequential and nonsequential recall. For both groups, nonsequential recall was superior to sequential, and was better for conceptually and linguistically similar words than for phonic and control ensembles.

IV-8 Reading and language abilities

DEAN, RAYMOND S., & KULHAVY, RAYMOND W. Effects of language facility in learning. *American Educational Research Journal*, Fall 1978, *15*, 501-506.

Examines the effects of vocabulary facility on learning various paired associates among sixty-four fifth and sixth graders. Subjects were subgrouped into high and low vocabulary groups on the basis of vocabulary subtest scores from the *Iowa Test of Basic Skills*. The children were then individually administered CVC's, paralogs, and simple words in a 3-trial paired-associate learning task. Locus of facilitation was found primarily in upper vocabulary groups and for familiar words rather than paralogs and CVC's. Low vocabulary subjects produced fewer mediators and were less likely to get an item correct when a mediator was given.

Weeks, Thelma E. Early reading acquisition as language development. *Language Arts,* June 1979, *56,* 515-521.

Contends that written language can be learned concurrently with the acquisition of oral language. Cites five pieces of research to illustrate this proposition.

Anselmo, Sandra. Improving home and preschool influences on early language development. *The Reading Teacher,* November 1978, *32,* 139-143.

Suggests that parents and others who work with very young children need support and training to provide children with the experiences they need. Documents the importance of prekindergarten years in language development and explores the influence of home, school, and environmental factors on language development.

Glazer, Susan Mandel, & Morrow, Lesley Mandel. The syntactic complexity of primary grade children's oral language and primary grade reading materials: a comparative analysis. *Journal of Reading Behavior,* Summer 1978, *10,* 200-203.

Assesses and compares the syntax in the oral language of ninety 6-, 7-, and 8-year-olds with the syntax found in the written language of reading instructional materials prepared for children of the same age. Subjects were shown a picture book and asked to react to the content; language samples were then recorded and analyzed using the Botel, Dawkins, and Granowsky Syntactic Complexity formula. Four common reading series were analyzed in the same manner. Results indicated that the reading materials were more complex syntactically than the oral language of the children.

Lyons, Arthur W.; Teer, Pallas; & Rubenstein, Herbert. Age-at-acquisition and word recognition. *Journal of Psycholinguistic Research,* May 1978, *7,* 179-187.

Investigates the effects of age-at-acquisition on the recognition latencies of twenty-eight college students. Subjects were tachistoscopically presented two sets of words for recognition; the first set was considered to be comprised of twenty-six words subjects should have acquired between the ages of 2 and 4, while the second set of twenty-six words should have been acquired between the ages of 7 and 9. Words were similar in function and length. It was found that, with word frequency controlled, words judged to be of early acquisition had a significantly lower recognition threshold than words judged to be of later acquisition.

Ratekin, Ned. A comparison of reading achievement among three racial groups using standard reading materials. In Dina Feitelson (Ed.) *Cross-Cultural Perspectives on Reading and Reading Research.* Newark, Delaware: International Reading Association, 1978. 62-71.

Reports a study of 117 first through third graders that focused on differences in reading performance among the children as a function of their language background, although the materials used to teach reading and the children's socioeconomic backgrounds were identical. Subjects in the study were assigned to one of three groups based on race: Anglo, Black, or Chicano. Pre- and posttesting of reading ability was done with the *Metropolitan Achievement Test;* a basic sight word test was also administered to all subjects. No significant differences were found between pre- and posttesting among the three groups. Results are discussed relative to the fact that the children in the study differed more with regard to level of language development than language differences; use of specialized content/materials for linguistically different children is also discussed.

OMOTOSO, SAM O., & LAMME, LINDA LEONARD. Using wordless picture books to assess cross-cultural differences in seven year olds. *The Reading Teacher,* January 1979, *32,* 414-416.

Examines cultural and language differences among ninety 7-year-olds, thirty of whom were from Nigeria and used English as a second language and sixty of whom were from America and used only English. The American sample consisted of thirty Blacks and thirty Whites. Subjects were asked to tell a story in their first language after they had taken time to look through a wordless, culture-free picture book. Stories were then rated on two dimensions of visual literacy and seven dimensions of linguistic competence. Although the ethnic group performed equally in recognizing things in the story, the bilingual tendencies of Nigerian children served as an advantage in identifying and naming objects. White American children were superior in storytelling skills. Nigerian subjects included very few feeling words in their stories and told longer stories; ethnicity was consistently related to differences in mean scores on syntax.

SULZBY, ELIZABETH. Children's explanations of word similarities in relation to word knownness. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978. 51-55.

Investigates the concept of what a word is with 120 children in grades 1 through 6. Each child took part in two tasks: a Knownness Rating for words in which subjects were tested for word pronunciation and word meaning, and a Word Choice task in which the child explained how chosen words went together. Results indicated no main effects of grade level as regards their semantic concept of the word. However, older children responded to words more as semantic than structural units.

FERREIRO, EMILIA. What is written in a developmental answer? *Journal of Education,* Fall 1978, *160,* 25-39.

Investigates the ability of sixty-eight children from 4 to 6 years of age to establish correspondences between parts of a normally written sentence and segments of the corresponding utterance. Subjects were subgrouped into two SES categories, high and low, based on parental occupation; each was interviewed individually. The experimenter wrote a sentence in front of each child, read the sentence while following it with the finger, and asked the child to repeat the sentence. Sentence specifics were probed for by the experimenter by asking the children "What do you think is written here?" Responses were classified into six developmentally ordered categories. Children were found not to deal with written sentences in the same manner skilled readers do; yet, they evidenced precise ideas about what could be found in written text. At first children do not expect the verb to be written; then the verb is supposed to be graphically represented, but articles are not.

LUNDBERG, I., & TORNEUS, M. Nonreaders' awareness of the basic relationship between spoken and written words. *Journal of Experimental Child Psychology,* June 1978, *25,* 404-412.

Assesses the awareness of the relationship between spoken and written words of 100 Swedish children ranging in age from 4 to 7 prior to their receiving formal reading instruction. Subjects were presented with seventy-two word pairs (spoken and written), each consisting of one short and one long word. Subjects then identified a target word on a card and were asked to explain their choice. The basis for a correct nonreading solution was attention to the surface aspects of words and recognition of the relation between sound duration and number of graphemes. In the youngest age group, irrelevant and nonlinguistic solutions predominated. Older children, however, were guided by semantic content. Proper understanding of the relationship between spoken and written words was observed only among some of the oldest children in the study.

LAPKIN, SHARON, & SWAIN, MERRILL. The use of English and French cloze tests in a bilingual education program evaluation: validity and error analysis. *Language Learning,* December 1977, *27,* 279-314.

Examines the utility of cloze tests in assessing language proficiency in a bilingual program. Fifth grade pupils in both English and French classes were administered cloze tests in these respective languages. Four groups received the cloze test in both languages, while the other groups were tested in either French or English. The cloze tests were slightly less than 300 words long with an every-seventh-word deletion pattern. Replacement words were scored as exact responses, acceptable responses, incorrect responses, or non-responses. Coefficients of correlation between the cloze tests and other language achievement measures *(Comprehensive Test of Basic Skills)* were calculated for both languages and found to be high. Error analyses were undertaken to compare quantitatively and qualitatively the errors made by bilingual subjects with those made by comparison groups of English students and students in strictly French schools. Differences between the errors of English-French bilingual pupils and unilingual English pupils were negligible. English-French bilinguals, however, made more errors than the unilingual educated French pupils. Bilinguals used incorrect parts of speech more frequently than did unilinguals. The authors suggest the use of the cloze procedure as a valid, economical, and reliable measure of overall language proficiency and also feel that strategies used by second language learners in responding to a cloze passage are similar to those used by their native language counterparts.

HARDYCK, CURTIS. Recognition memory processes and language dominance in bilingualism. *Journal of Psycholinguistic Research,* January 1978, *7,* 25-34.

Examines the mode by which a fluent bilingual stores and retrieves words in each of his/her languages. Twelve adult Hungarian-English speaking bilinguals ranging in age from 32 to 50 years old participated in the study. Subjects were asked to recognize words from a list; their subsequent responses from memory were recorded. Stimulus word lists were presented in both English and Hungarian; List 1 was comprised of concrete words while List 2 was composed of more abstract words. Using a procedure by which errors in judgment could be detected, results indicated that storage of words from different languages is shared but is organized and retrieved primarily through the bilinguals' native language.

NILAGUPTA, SIRIRAT. The relationship of syntax to readability for ESL students in Thailand. In Dina Feitelson (Ed.) *Cross-cultural perspectives on reading and reading research.* Newark, Delaware: International Reading Association, 1978. 89-102.

Investigates the effect of syntax on the comprehension of written English among 426 Thai college graduate students who had studied English as a second language. The *English Screening Test,* administered to subjects, included measures of vocabulary, structure comprehension, and reading comprehension. Correlation coefficients were computed between the reading comprehension and structure comprehension subtests; overall, this correlation was .54. Similarly, 5[illegible]3 undergraduate Thai students were given a writing ability test; the correlation coefficient in this instance with structure comprehension was .64.

LINDMAN, RALF. Self-ratings and linguistic proficiency in bilingual subjects. *Language and Speech,* October/December 1977, *20,* 325-332.

Reports a study wherein 100 bilingual adults rated their own linguistic proficiency; these ratings were then compared to test results of subjects' linguistic proficiency. Subjects were matched on self-rated proficiency in Swedish and Finnish and then tested on six variables of linguistic proficiency in each language by parallel tests. The tests represented skills dependent upon decoding (understanding and reading) and encoding (speaking and writing). Factor analysis revealed two factors for each language: a performance factor and a self-rating factor. Subjective impression of linguistic proficiency appeared to be equally undifferentiated in each language, and to some degree independent of test performance.

MAGISTE, EDITH. The competing language systems of the multilingual: a developmental study of decoding and encoding processes. *Journal of Verbal Learning and Verbal Behavior,* February 1979, *18,* 79-89.

Studies the developmental changes in elementary decoding and encoding processes of 163 Swedish-German bilingual students. Tasks consisted of naming pictures in both languages, naming numbers in both languages, performing simple letter marking tasks, and reading aloud words in both languages. It was demonstrated that decoding in two languages, expressed in terms of reaction time, develops faster than encoding. The point at which a shift occurs where facility in the second language exceeds facility in the first language is at four to five years Swedish residency for decoding and six years for encoding. Results are discussed with reference to an interdependence hypothesis of bilingual storage.

Dank, Marion, & McEachern, William. A psycholinguistic description comparing the native language oral reading behaviour of French immersion students with traditional English language students. *The Canadian Modern Language Review*, March 1979, *35*, 366-371.

Examines the degree to which twenty students from varying linguistic backgrounds utilize graphophonemic, syntactic, and semantic clues in reading. Half of the sample was placed in French classes and came from a French-speaking background, while the other half was placed in traditional English language classes. Subjects were administered the *Reading Miscue Inventory*. The French immersion group demonstrated slightly more effective use of graphic and sound cues, more effective use of syntactic and semantic cueing systems, more use of correction strategies, more effective comprehension, and more effective story retelling.

Edwards, V.K. Dialect interference in West Indian children. *Language and Speech*, January-March 1978, *21*, 76-86.

Examines dialect interference among 127 West Indian children. Subjects were administered tests in four major areas: vocabulary (general vocabulary and vocabulary common to Creole and British English), syntax (tense and aspect, voice, zero comulas, and rule exceptions), morphology (suffixing structural pointers), and phonology. Subjects were subdivided into two groups: 12-13 year olds and 14-16 year olds. Subjects were found to be influenced by Creole lexis, syntax, morphology, and phonology even when they had been born in Britain. Performance of British born and West Indian born subjects was similar. Creole was found also to affect the efficiency of understanding British English.

White, Hazel L. Coping with dialect differences in reading instruction. *The Clearing House*, March 1979, *52*, 340-342.

Outlines some points to consider when teaching students of different language patterns and experiences. Refers to some research.

Masland, Susan W. Black dialect and learning to read: what is the problem? *Journal of Teacher Education*, March/April 1979, *30*, 41-44.

Summarizes evidence for and against dialect interference during the reading process.

Olejnik, Shirley. Factors affecting the relationship between listening and reading. *Reading Horizons*, Summer 1978, *18*, 277-281.

Looks at research on listening and reading and draws tentative conclusions about implications for teaching reading.

WORK, WILLIAM. Toward comprehensive communication literacy. *Communication Education*, November 1978, *27*, 336-342.

Annotates selected ERIC/RCS documents and articles that relate speaking and listening to the larger family of communicative competencies.

DEVINE, TOM G. Listening, reading—and thinking. *New England Reading Association Journal*, 1978, *13*, 14-19.

Probes the relationship between listening and reading. Also reviews and evaluates some information and insights that teachers and researchers have accrued.

KLEIMAN, GLENN M., & SCHALLERT, DIANE L. Some things the reader needs to know that the listener doesn't. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference*, 1978. 138-143.

Focuses on the differences between listening and reading. Considers the question: what do skilled readers need to know that they would not have acquired via experience with spoken language?

LEVI, GABRIEL, & MUSATTI, TULLIA. Phonemic synthesis in poor readers. *British Journal of Disorders of Communication*, April 1978, *13*, 65-74.

Compares twenty-four poor and twenty-four average readers at the end of first grade with regard to oral phonemic synthesis and achievement in reading and writing. Subjects were first categorized as poor or average readers by their teachers. Subsequently, all subjects were administered selected tests of copying, writing, and word reading; writing of intact dictated sentences; reading of printed directions and short paragraphs; oral and written description based on stimulus pictures; and oral phonemic synthesis wherein subjects were read twenty-five words uttered in the form of separate phonemes (then blended phonemes if subjects failed to recognize the word). Substantial correlations were revealed among oral phonemic synthesis and writing and reading tests. Overall, the results indicated a specific linguistic disability among poor readers making them incapable of reutilizing oral language and translating oral language into written language.

MOSELEY, CAROLINE, & MOSELEY, DAVID. *Language and reading among underachievers: a practical review of research*. Atlantic Highlands, New Jersey: Humanities Press, 1977.

Overviews a wide range of studies on language and reading skills. Includes chapters on resources available for language and reading programs and the allocation of research funds.

MACNAUGHTON, DOLORES. Language development and critical thinking. In *Classroom-Relevant Research in the Language Arts*. Coordinated by Harold G. Shane and James Walden. Washington, D.C.: Association for Supervision and Curriculum Development, 1978. 18-24.

Examines some research on critical thinking, singling out its relationship to variables such as vocabulary development and academic achievement. Some studies on reading are included.

DWYER, EDWARD J. Research and implications concerning children's literature and reading instruction. *Reading World*, October 1978, *18*, 33-36.

Examines the relationship of children's literature and reading instruction. Various studies and expert opinions are examined to determine the importance of literature to reading competence.

WHITE, RICHARD T. Retention of linked and ordered sentences. *The Australian Journal of Education,* March 1976, *20,* 91-92.

Examines in four studies the extent to which free recall of meaningful information is a function of the perceived linking and ordering of the information. Subjects were shown groups of sentences that varied in degree of linking and ordering, then were required to recall the sentences at a later time. The linking and ordering of sentences had a positive effect on recall. In instances where cueing was supplied, only subjects who wrote answers appeared to perform better. Secondary school subjects in the study appeared to follow a marked strategy of storing information verbatim.

COKE, ESTHER U. The effect of altering the context cues in prose on reading rate in a search task. *Journal of Reading Behavior,* Winter 1977, *9,* 365-380.

Explores the way in which sixty-four college and high school subjects search for lexical information in prose without processing the contextual information that results from the connectedness of prose. Readers were given the task of searching for a target word in a passage that had been randomly rearranged. The results showed that when searching for specific words, readers read the normal word arrangements of passages faster than their random arrangements, regardless of readability of the passage. When searching for synonyms, normal arrangements were read faster than random arrangements only when passages were more readable. Text arrangement, search task, and readability also affected recall on a completion test. The author concluded that readers process contextual information even when looking for specific words, and that the kind of contextual information processed is dependent upon the literal and semantic nature of the search task.

HABERLANDT, KARL, & BINGHAM, GEOFFREY. Verbs contribute to the coherence of brief narratives: reading related and unrelated sentence triples. *Journal of Verbal Learning and Verbal Behavior,* August 1978, *17,* 419-425.

Studies the subjective comprehensibility and reading times of twenty college students in reacting to ten related and ten unrelated sentence triplets featuring verb differences. Comprehensibility ratings and reading time significantly favored related triplets. Longer reading times were required for both related and unrelated sentences in serial third order position.

CARAMAZZA, ALFONSO; GROBER, ELLEN; GARVEY, CATHERINE; & YATES, JACK. Comprehension of anaphoric pronouns. *Journal of Verbal Learning and Verbal Behavior,* October 1977, *16,* 601-609.

Examines implicit causality in verbs and its role in determining coreference of potentially ambiguous anaphoric pronouns in a timed comprehension task with forty-eight college students. Subjects were asked to decide the coreferentiality of a pronoun in pairs of sentences such as *John telephoned Bill because he withheld some information/wanted some information.* Verbs were first empirically classified into those that bias assignment toward the first noun phrase of the main clause and those that bias assignment toward the second noun phrase. Time to respond was faster for congruent sentences. This was also true for control sentences such as *Sue telephoned Bill because he withheld some information* in which gender differences eliminated all potential ambiguities. It was argued from these results that implicit causality is an important determinant of pronoun assignment and that ambiguities are normally resolved at clause boundaries.

FISHMAN, ANNE STEVENS. The effect of anaphoric references and noun phrase organizers on paragraph comprehension. *Journal of Reading Behavior,* Summer 1978, *10,* 159-170.

Presents nature and results of a study of the influence of anaphoric (prior identical textual) references and noun phrase organizers upon the reading performance of 119 college students as measured by forty-eight multiple choice questions over twelve base paragraphs constructed so that experimental conditions were systematically introduced. A significant difference was found in favor of the noun phrase organizer condition, but not for anaphoric reference or for interaction between noun phrase or anaphoric conditions.

GOODENOUGH-TREPAGNIER, CHERYL, & SMITH, FRANK. Thematization and intonation in the organization of sentences. *Language and Speech,* April-June 1977, *20,* 99-107.

Examines the processes of thematization and intonation in the way in which sixteen college students and faculty organize sentences. Subjects were presented a paragraph to be read; pairs of sentences were embedded within the paragraph that required subjects to choose which of the sentences from the pair maintained the topic of the discourse and which failed to do so. The intonation patterns with which sentences of both types were read aloud by subjects did not differ as a function of whether or not the sentences were topic-maintaining.

RIPS, LANCE J.; SMITH, EDWARD E.; & SHOBEN, EDWARD J. Semantic composition in sentence verification. *Journal of Verbal Learning and Verbal Behavior,* August 1978, *17,* 375-401.

Factors sentences of S-V-Adj-O pattern into three variant propositions; 1) adjective-object-noun, 2) subject noun-verb-object noun, and 3) subject noun-verb-adjective. Three experiments are reported which examine the verification of truth task reaction time of subjects to these experimental variations in semantic composition. Effects of truth value generally favored propositions 2 and 3.

HOOK, PAMELA EVANS, & JOHNSON, DORIS J. Metalinguistic awareness and reading strategies. *Bulletin of the Orton Society,* 1978, *28,* 62-78.

Constructs tests of metalinguistic awareness of intonation, phonology, and grammar (auditory) and compares performance for twelve proficient readers and fourteen learning disabled (LD) readers. Subjects, all males, did not differ significantly in SES, age, intelligence, or general language ability, but proficient readers were substantially and significantly better on the *Gray Oral and Reading Tests* and the *Wide Range Achievement Test.* Results indicated that LD subjects performed significantly poorer than proficient readers on all measures of metalinguistic awareness, with phonological differences of substantial degree occurring between the two groups.

HANSON, KAREN M.; SCHREINER, ROBERT; & HUMMEL, THOMAS J. The relationship between reading ability and semantic verification tasks. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978. 77-83.

Compares the performance of thirty community college students with *McGraw-Hill Reading Test* percentiles of 73 or above with thirty community college students with percentiles 27 or below on response to semantic verification tasks which were based upon reading of thirty three-sentence paragraphs. Paragraph semantic variables included prototype plus descriptor, prototype plus noun, and prototype plus nondescriptors. Test items reflected category-prototype statements of positive and negative nature, use of the prime, and verbatim sentence recognition. Good readers answered significantly more items correctly. Good readers demonstrated significantly greater power to respond to true than to false statements.

GRAESSER, ARTHUR C. Tests of a holistic chunking model of sentence memory through analyses of noun intrusions. *Memory & Cognition,* September 1978, *6,* 527-536.

Describes a model proposed to account for the acquisition and retrieval of unrelated sentences in memory experiments, and tests the model with two experiments. Subjects consisted of two groups of sixty undergraduates who studied sets of sentences and were tested by written recall. Experimental conditions consisted of intrusion of related and unrelated nouns. Findings revealed that noun intrusions within a recovered proposition were related conceptually to presented nouns.

FROESE, VICTOR. The quality, direction, and distance of within-sentence contextual constraints (abstracted). *Reading Research Quarterly,* 1978-79, *14*(2), 265-271.

Provides abstract of dissertation investigating constraints imposed by immediate sentence completion performance of 408 sixth grade subjects randomly assigned to study conditions. The experimental sentences were formed to provide high and low associative chaining and degree and direction of form class word constraint. Among the results, the associative chaining factor was found to be significant, forward constraints exerted more influence than backward restraints, and differences were found between syntactic elements and constraint distance effect produced.

Chihara, Tetsuro; Oller, John; Weaver, Kelley; & Chavez-Oller, Mary Anne. Are cloze items sensitive to constraints across sentences? *Language Learning,* June 1977, *27,* 63-69.

Examines the accuracy of forty-one native English speaking undergraduates and 201 native speaking Japanese members at three levels of English competency in reading two cloze-deleted passages, one passage in original sequence of sentences and the second of scrambled sentence sequence. Passages were taken from an English text for non-native speakers. Main effects were found significant at the .001 level for sequential order superiority and for level of English proficiency. Cloze test items embedded in normal prose appear sensitive to constraints across sentences.

Grundin, Hans U., Courtney, Brother Leonard; Langer, Judith; Pehrsson, Robert; Robinson, H. Alan; & Sakamoto, Takahiko. Cloze procedure and comprehension: an exploratory study across three languages. In Dina Feitelson (Ed.) *Cross-cultural perspectives on reading and reading research.* Newark, Delaware: International Reading Association, 1978. 48-61.

Discusses design and general results of an exploratory study in which three 250-300 word passages of original English, Japanese, and Swedish were translated into the other two languages, were clozed (every fifth word), and were administered to fifth grade children in Canada, U.S., Japan, and Sweden (N's = 119-188), believed to represent equivalent cross sections of SES homes. All subjects were assessed by identical cloze criterion and on inclusion of basic ideas on a free response test of the general meaning of the passage. Correlation coefficients between cloze comprehension and global comprehension were low moderate and positive; attenuated r's for Japan, Sweden, and U.S. respectively were .59, .57, and .65. Mean cloze percentages between language groups were: Japanese (52 percent), English speaking (46 percent), Swedish (44 percent).

Zinck, R. Ann. The relation of comprehension to semantic and syntactic language cues utilized during oral and silent reading. In. P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978. 154-160.

Correlates the response of sixty-eight seventh grade students reading one to four years below grade level on *Stanford Diagnostic Reading Test II (SDRT)* literal and inferential comprehension, an every fifth-word cloze test on a narrative selection, and an oral reading passage scored for grammatic acceptability and for semantic and syntactic change. A significant but moderate r of .56 was revealed between cloze and SDRT comprehension scores. Cloze syntactic and semantic mean change scores did not differentially predict total cloze scores. No significant relationship was determined between syntactic predictors and inferential comprehension.

SCHMIDT, EUNICE L. What makes reading difficult: the complexity of structures. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978. 106-110.

Tests the hypothesis that complexity of linguistic structures will influence reading comprehension. Two versions of a story were developed which did not differ notably in readability but did differ in words-per-T-unit and in scores obtained on the *Schmidt-Kittel Linguistic Complexity Scale.* Every-fifth-word-deleted cloze tests of the two versions were administered to thirty-two graduate education students and twenty-two college seniors. Differences between the cloze scores on the two versions were significant, although cloze test scores indicated little basic difficulty with either version.

IV-9 Vocabulary and word identification

EHRI, LINNEA C. Beginning reading from a psycholinguistic perspective: amalgamation of word identities. In Frank B. Murray (Ed.) *The recognition of words,* Newark, Delaware: International Reading Association, 1978. 1-33.

Proposes a general model for the recognition of words which requires that various aspects of words—namely their phonetic, morphological, semantic, syntactic, and orthographic characteristics—must be amalgamated into the child's previously constructed linguistic systems. Analyzes the contributions each aspect makes to word recognition and cites research to support the psychological reality of each aspect.

BARRON, RODERICK W. Access to the meanings of printed words: some implications for reading and for learning to read. In Frank B. Murray (Ed.) *The recognition of words.* Newark, Delaware: International Reading Association, 1978, 34-56.

Argues that the meanings of words can be assessed directly from the graphic representation without the need for an intervening phonetic or sound representation. Research evidence is cited.

LEONG, C. K., & HAINES, C. F. Beginning readers' analysis of words and sentences. *Journal of Reading Behavior,* Winter 1978, *10,* 393-407.

Studies the awareness of phonemes, syllables, and sentences of seventy-two subjects, twenty-four randomly selected from each of grades 1, 2, and 3. Reading performance was assessed with the *Schonell Word Recognition Test* and the *Gates-McKillop Oral Reading* subtest. Reading performance was found to be significant between grades. The tasks under investigation consisted of tap analyses of phonemes and syllables presented by tape (aural), recalling sentences presented on tape while doing tap analysis, and scores on the *Lindamood Auditory Conceptualization Test.* The auditory conceptualization task contributed most weight to canonical correlation of reading scores with experimental tasks for all subjects. Syllable segmentation was easier than phoneme segmentation across grades. Sentence complexity influenced recall performance.

KRATOCHWILL, THOMAS R.; DEMUTH, DENNIS M.; & CONZEMIUS, WILLIAM C. The effects of overlearning on preschool children's retention of sight vocabulary words. *Reading Improvement,* Winter 1977, *14,* 213-228.

Examines the effectiveness of varying amounts of overlearning on the retention of sight vocabulary words for sixty-four preschool children. Subjects ranged in age from 51 months to 73 months, with a mean age of 64 months. Subjects were randomly assigned to one of three overlearning conditions. In the first or control condition, subjects learned four common nouns to a criterion of two errorless trials. In the second, subjects learned the four words to criterion and received ten additional overlearning trials. Subjects in a third condition received twenty overlearning trials. After approximately 60 minutes, subjects were assessed for recall and recognition of words learned when presented with two distractors. Results indicated that only the twenty overlearning group retained more words than controls and that the relationship between overlearning and retention was linear. The twenty overlearning condition added only one more word to the list of remembered words.

FUSARO, JOSEPH A. Grapheme-phoneme and phoneme-grapheme correspondences. *Perceptual and Motor Skills,* August 1978, *47,* 171-174.

Compares and contrasts underlying skills required by graphemic and phonemic recall among twenty-six second graders. Subjects were asked to identify twenty-one single consonant graphemes and their corresponding phonemes. Although a research design which called for counterbalanced sequence by correspondences showed a significantly higher mean score for graphemic recall, the actual difference between the two scores was small. A significant rank-order correlation indicated a relationship between the two types of correspondences, but the skills required to make the two types of correspondences were not identical. The results suggest caution should be exercised when inferring students' facility with phonemic recall from performance on instruments which measure graphemic recall.

EHRI, LINNEA C., & WILCE, LEE S. The mnemonic value of orthography among beginning readers. *Journal of Education Psychology,* February

1979, *71,* 26-40.

Investigates the mnemonic value of graphic information to learning sounds and spellings among ninety-six first and second graders. Subjects were taught in four experiments CVC nonsense sounds as oral responses to stimuli including geometric figures, numbers, or letters. Various types of adjunct aids and activities occurred during study and feedback periods. In all experiments, sound learning was fastest when correct spellings were seen or imagined. Spellings appeared to be more effective since they provide readers with orthographic images useful for symbolizing and storing sounds in memory.

GROFF, PATRICK. Vowel letters and word recognition by beginning readers. *Journal of Reading Behavior,* Summer 1978, *10,* 197-199.

Examines the abilities of twenty-three first grade and twenty-six second grade pupils to read true and altered spellings of ten words that they had either previously pronounced correctly or had misnamed on a graded word list. In each altered spelling, only one vowel letter was changed. Pupils were shown five misnamed words and then asked to identify which of two spellings of the word (altered or true) they had seen. This procedure was repeated with the five most difficult words they had correctly identified on the list. Grade 1 pupils correctly matched previously miscalled words 72 percent of the time, and previously correct words 86 percent of the time. For grade 2 pupils, the percents were 88 and 92 for misnamed and correctly named words, respectively. The author states that the findings indicate that beginning readers perceived vowel letters in words and that they have good short-term memories for the true vowel spellings of words that they can either read or not read.

NILES, JEROME A., & TAYLOR, BARBARA M. The development of orthographic sensitivity during the school year by primary grade children. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978. 41-44.

Examines the acquisition of sensitivity to orthographic structure among fifty-one first, second, and third grade children. Ten sets of 8-letter approximations to English were presented to subjects, including zero-order, second-order, and fourth-order approximations. Subjects were individually asked to select the one pseudoword from a set of three which was most similar to a real word; rankings were done in October, May, and the following October. Subjects were also administered the reading comprehension subtest of the *Peabody Individual Achievement Test.* Results showed that sensitivity to orthographic structure is acquired during the second half of first grade. While subjects continued to make progress in this acquisition process, it slowed during second and third grades.

STANOVICH, KEITH E.; PURCELL, DEAN G.; & WEST, RICHARD F. The development of word recognition mechanisms: inference and unitization. *Bulletin of the Psychonomic Society,* February 1979, *13,* 71-74.

Presents the results of eighty-four subjects (twenty kindergarten, twenty first graders, twenty third graders, and twenty-four college students) obtained on six conditions of searching for target letters embedded in columns of words and nonwords of upper case, lower case, and mixed case graphic fields. Adults and third grade subjects showed significant word effect superiority when searching upper- and lowercase fields but not for mixed fields. First grade subjects displayed similar but nonsignificant tendencies.

CONDRY, SANDRA M.; MCMAHON-RIDEOUT, MARGARET; & LEVY, ANITA A. A developmental investigation of selective attention to graphic, phonetic, and semantic information in words. *Perception and Psychophysics,* February 1979, *25,* 88-94.

Investigates the development of the ability of 112 second graders, fifth graders, and college students to extract graphic, phonetic, and semantic information from words. Subjects made similarity judgments on sets of three words that required attention to orthographic, phonetic, or semantic information. Accuracy and speed increased with age. Grade 2 subjects were able to perform the task of selecting a given feature of a word reasonably well. The relative difficulty among the three tasks decreased with age of subjects suggesting a developmental change, most notable between second and fifth grade, toward facility in extracting phonetic and semantic information from words. The presence of confusable, potentially relevant information had detrimental effects overall which decreased with age and varied with the type of task and type of distractor. The authors state that their results do not support the thesis that there is a developmental shift from dependence on the sound of printed words to direct access to meaning from print.

MCCONAUGHY, STEPHANIE H. Word recognition and word meaning in the total reading process. *Language Arts,* November/December 1978, *55,* 946-956.

Reviews recent evidence from psycholinguistic research on semantic development and early theory in semantics and reading.

ADAMS, MARILYN JAGER. Models of word recognition. *Cognitive Psychology,* April 1979, *11,* 133-176.

Reviews major hypotheses concerning word recognition and reports on two pairs of experiments. In the first pair, sixteen adult subjects were tachistoscopically presented recognition tasks of words, orthographically regular pseudowords, and irregular nonwords of varied type fonts. Results of first two studies suggest that perceptual facilitation of words, if it exists, operates above visual feature extraction. Subjects for Experiments III and IV were eight adults. Stimuli were augmented by higher frequency words and stimulus onset asynchrony were varied from 5 to 45 ms controlled exposure. Technical findings of the studies indicate an advantage for words, although the information processing of words and nonwords could not be differentiated directly.

CHISHOLM, DIANE, & KNAFLE, JUNE D. Letter-name knowledge as a prerequisite to learning to read. *Reading Improvement*, Spring 1978, *15*, 2-7.

Investigates the effect of letter name knowledge on the ability of sixty first graders to learn to read. Students were assigned to a letter name group, a letter discrimination group, or a control group. Subjects were taught to read artificial letters by a transfer methodology. Results revealed that the letter name group completed the transfer task (learning words) in significantly fewer trials than either the control or letter discrimination groups, neither of which differed from one another. No interactions or sex differences were found.

BARON, JONATHAN. Orthographic and word-specific mechanisms in children's reading of words. *Child Development*, March 1979, *50*, 60-72.

Describes design and results of three studies of word association patterns in elementary grade readers. In the first, twenty fourth grade disabled readers pronounced three lists of thirty-six items consisting of matched equal numbers of phonemically consistent, phonetic exceptions, and nonsense words. The second study involved twenty-four second grade normal range readers, pronouncing the lists of the first study, but with one unaided and one aided practice session. Subjects for the third study consisted of twenty normal range second grade readers, sixteen learning disabled intermediate grade pupils, and twenty first grade pupils. The same reading lists were employed, but subjects were trained in using analogous words for half the list. Numerous findings are presented by study and by comparison between the studies. General results reveal difference among subjects in reliance upon spelling-sounding rules versus word-specific association. Ability to read nonsense words correlated with ability to read phonetically consistent words. Boys made greater use of word rules than girls. Instruction in use of analogous words improved performance.

MARSH, GEORGE, & DESBERG, PETER. Pattern-component transfer in learning to read. *Journal of Research in Reading*, September 1978, *1*, 136-141.

Assesses the transfer between whole words and their components for sixty prereading children. Subjects were taught three types of lists in an artificial orthography: words (W), sounded-out words (S), and isolated letters (L). Transfer between the lists was studied in all possible combinations (W-S, W-L, S-W, S-L, L-W, L-S), and subjects were assigned randomly to one of the six conditions. No significant direct transfer was found from letter sounds to whole words or vice versa. However, there was positive transfer from sounded-out lists to both letter sounds and whole words.

BLAKE, KATHRYN. Massed and distributed practice and retarded and normal pupils' learning sight vocabulary. *Journal of Research and Development in Education, 9*, Monograph 1976, 12-13.

Proposes to examine retarded and normal pupils' use of massed and distributed practice in learning sight vocabulary. In Treatment 1, subjects were given twelve trials in one sitting; in Treatment 2, sets of four trials were given in three successive weeks. Subjects were to learn the shorthand symbols for twelve words. Within both treatments, normal readers exceeded the retarded. The massed practice group reached a higher level of accuracy at a slightly faster rate than the group using distributed practice.

HERON, TIMOTHY E., & AXELROD, SAUL. Effectiveness of feedback to mothers concerning their children's word-recognition performance. *Reading Improvement,* Summer 1976, *13,* 74-81.

Studies the effect of provision of feedback to mothers regarding their children's performance in word recognition. Three innercity Black fourth and fifth graders were administered a series of word recognition tasks in order to determine their vocabulary knowledge level prior to the experimental treatment. Subjects were then given the words to study at home and testing took place each day to determine how many words the children had learned at home. Words were obtained from a basal reading series and ten were given each day. After a baseline period of varying length for the three subjects, the experimenter instituted a feedback period in which mothers were called each day, given information regarding their children's daily performance, and encouraged to help their children study the new words. Results indicated that the telephoning technique sometimes can be an effective strategy to use in the development of word recognition skills.

MARSH, GEORGE; DESBERG, PETER; & COOPER, JAMES. Developmental changes in reading strategies. *Journal of Reading Behavior,* Winter 1977, *9,* 391-394.

Investigates the developmental nature of strategies used in pronouncing unfamiliar pseudowords with forty fifth graders, forty eleventh graders, and forty college subjects. Subjects were asked to pronounce a list of ten pseudowords constructed so that each word would be pronounced differently depending upon the strategy used. For example, the pseudoword "tepherd" would be pronounced "tefard" according to grapheme/phoneme correspondence strategy and as "tepard" (as in "shepherd") by an analogy strategy. Results pointed toward the existence of a developmental change in the strategies used in reading unfamiliar words. Fifth graders' dominant strategy in the free response condition was a grapheme/phoneme correspondence strategy, while college students preferred the analogy strategy.

KRUEGER, LESTER E. Features versus redundancy: comments on Massaro, Venezky, and Taylor's "Orthographic regularity, positional frequency, and visual processing of letter strings". *Journal of Experimental Psychology: General,* March 1979, *108,* 125-130.

Reacts to a previous study on orthographic regularity, positional frequency, and visual processing of letter strings. Proposes an alternative of processing to account for the data.

MASSARO, DOMINIC W.; VENEZKY, RICHARD L.; & TAYLOR, GLEN A. Orthographic regularity, positional frequency, and visual processing of letter strings: a reply to Krueger's comments. *Journal of Experimental Psychology: General,* March 1979, *108,* 131-132.

Responds to criticisms of an earlier study of visual processing of letter strings.

ALLINGTON, RICHARD L., & FLEMING, JAMES T. The misreading of high-frequency words. *Journal of Special Education,* Winter 1978, *12,* 417-421.

Studies the oral reading accuracy of twelve good and twelve poor fourth grade readers reading one or more years below grade placement on a passage of 2.8 readability when presented in original form (contextual) and random word (no context) arrangement. Differences between good and poor readers in accuracy of recognizing high frequency words were significant under the no context condition, but not under original passage condition, which was rated at instructional level for poorer readers.

GROFF, PATRICK. Children's recognition of words in isolation and in context. *Reading Horizons,* Winter 1979, *19,* 134-138.

Studies the ability of forty-eight grade 1 and 2 pupils to read in context words that had previously been missed in isolation. Children were first presented with a word list to read aloud until they missed five words. They were then asked to read aloud five short sentences containing the five misnamed words. Grade 1 pupils correctly read only 17 percent of the graded words they had previously miscalled; grade 2 pupils correctly identified 36 percent.

PITTMAN, BETTIE. Recitation and learning nouns and verbs from context and from a list. *Journal of Research and Development in Education, 9,* Monograph 1976, 61-63.

Assess the relative effectiveness of learning new words from context and from a list in a passive manner and in an active manner for learning disabled (LD) and non-learning disabled (NLD) children. The active condition required writing the definition of a trigram using a list of prompts; the passive condition involved reading and rereading trigram definitions. Six trigrams were used as verbs; six as nouns in both context and list conditions. NLD scored higher than LDs in learning. Recitation tended to be better than reading alone when definitions of nouns and verbs were presented in context. This was particularly true for the NLDs. Recitation and reading alone were equally effective when definitions were presented in isolation.

PITTMAN, BETTIE. Context versus isolation when learning nouns and verbs with and without recitation. *Journal of Research and Development in Education, 9,* Monograph 1976, 64-66.

Assesses the comparative influence of context versus isolation in learning nouns and verbs with and without recitation. Subjects were learning disabled (LD) and normal children who received trigrams and their definitions in context or in list form. Normal subjects performed better regardless of treatment. Context aided the learning of nouns and verbs with recitation. When pupils learned words without recitation, context and isolation tended to be equally effective.

MILLER, JOHN W., & ISAKSON, RICHARD L. Contextual sensitivity in beginning readers. *The Elementary School Journal,* May 1978, *78,* 325-331.

Examines children's word recognition behavior by noting the degree of contextual sensitivity among 108 randomly selected children in grades 1, 2, and 3. Three stories were modified in eight different ways by the insertion of pseudowords for nouns and verbs. Each student was asked to read orally a story at his appropriate grade level. In the story read, two sentences were modified at the verb condition, two at the noun condition, and four were unmodified control sentences. Errors were classified. First graders demonstrated no significant disruption that was due to the appearance of a pseudoword in place of a real word. Second and third graders, however, exhibited a higher proportion of errors on words surrounding the pseudowords. Thus, the findings demonstrated a developmental trend in sensitivity to contextual information in sentences.

SOBKOV, JOAN, & MOODY, MARK. Memory and reading: the effects of semantic context on word identification. *The Journal of General Psychology,* April 1979, *100* (second half) 229-236.

Examines the efficacy of alternative vocabulary training procedures with twelve first grade children. Subjects were identified as sight readers and were presented with three vocabulary training procedures: control (rote memory instruction), organization (subjective organization instruction), and semantic context (experimenter provided story incorporating the words taught). Results indicated that the training procedure that involved the words in a semantic context improved identification of individual words. The number of words read correctly in the semantic condition at a 2-day posttest was significantly higher than in either of the two other conditions. Identification performance in an immediate (3 minutes) condition showed no differences among treatments.

STANOVICH, KEITH E., & WEST, RICHARD F. Mechanisms of sentence context effects in reading: automatic activation and conscious attention. *Memory and Cognition,* March 1979, *7,* 77-85.

Investigates the effects of sentence context on the recognition of target words among sixty college students in two experiments. In Experiment 1, subjects named target words that were preceded by a congruous sentence context, an incongruous sentence context, or no sentence context within conditions of normal or degraded contrast reduction. Under normal stimulus conditions, a contextual facilitation effect, but no contextual inhibition effect was observed. When the target word was degraded, both contextual facilitiation and inhibition were observed. Experiment 2 further demonstrated that inhibition increased as the interval between contextual processing and target word onset was lengthened. The authors posit implications from the findings for the development of fluent reading.

FISCHLER, IRA, & BLOOM, PAUL A. Automatic and attentional processes in the effects of sentence contexts on word recognition. *Journal of Verbal Learning and Verbal Behavior,* February 1979, *18,* 1-20.

Investigates the word recognition abilities of 254 college students in five experiments in an effort to study automatic and attentional processes and the effects of sentence contexts on these processes. It was found, overall, that an incomplete sentence context facilitated a subsequent lexical decision only when the test word was a highly likely completion of the sentence. Context had no effect on congruent but unlikely words, while it inhibited responses to anomalous words. The inhibition was eliminated in a control condition in which none of the test words meaningfully completed the context. In contrast, subjects could not eliminate the inhibition or the facilitation when they were instructed to ignore the implication of each context.

Golinkoff, Roberta Michnick. Critique: Phonemic awareness skills and reading achievement. In Frank B. Murray & John J. Pikulski (Eds.) *The acquisition of reading: cognitive, linguistic, and perceptual prerequisites.* Baltimore: University Park Press, 1978. 23-41.

Examines data on segmentation skills. Includes a review of correlational studies, experimental studies, and training studies.

Mosberg, Ludwig. A response: comments on language by eye and by ear. In Frank B. Murray & John J. Pikulski (Eds.) *The acquisition of reading: cognitive, linguistic, and perceptual prerequisites.* Baltimore: University Park Press, 1978. 163-167.

Criticizes some research on automaticity of decoding that is related to development of literacy skills.

Miller, G. R., & Coleman, J. E. A methodological critique of Fleming's alternative for phonemic encoding. *Journal of Reading Behavior,* Fall 1978, *10,* 233-248.

Reanalyzes some previous research on phonemic encoding.

Tzeng, Ovid J. L.; Hung, Daisy L.; & Wang, William S-Y. Speech recoding in reading Chinese characters. *Journal of Experimental Psychology: Human Learning and Memory,* November 1977, *3,* 621-630.

Conducts two experiments with Chinese graduate students as subjects to investigate whether phonemic similarity affects the visual information processing of Chinese characters. In the first experiment, a short-term retention paradigm was utilized and in the second, a sentence judgment task. For both experiments, subjects' performance was found to be impaired by the introduction on phonemic similarity into the test materials. The authors discussed their findings with respect to the issues of orthographical differences and of speech recoding in reading.

Steinberg, Danny D., & Yamada, Jun. Are whole word kanji easier to learn than syllable kana? *Reading Research Quarterly,* 1978-79, *14*(4), 88-99.

The relative difficulty of learning Japanese word kanji and syllable kana is investigated with forty-two children, aged 3 and 4 years. Each was presented four items to learn, two kanji and two individual kana writing symbols. Items consisted of eighty-four different kanjo and eighty-four different kana symbols. It was discovered that the kanji were more easily learned despite being much more graphically complex. Of the kanji, 37 percent were learned within three trials; 15 percent were learned on the first trial. Most kana were not learned at all. Meaningfulness is interpreted as being much more important in learning writing symbols than is perceptual complexity.

ERICKSON, D.; MATTINGLY, I. G.; & TURVEY, M. T. Phonetic activity in reading: an experiment with Kanji. *Language and Speech, October/December 1977, 20,* 384-403.

Examines the ability of twelve foreign college students to recall kanjo characters in an effort to determine the nature of the phonetic short term storage requirement in reading. When pairs of characters in a silently read list were homophonous, recall was significantly poorer than when the silently read list included no such pairs. It was concluded that the linguistic process cannot readily disperse with phonetic short term storage; the design of the writing system appears to have little to do with this process.

PARK, SOJI, & ARBUCKLE, TANNIS Y. Ideograms versus alphabets: effects of script on memory in "biscriptual" Korean subjects, *Journal of Experimental Psychology: Human Learning & Memory,* November 1977, *3,* 631-642.

Reports four experiments on the memory of Korean adults (N's = 24 and 27) for words written in two Korean writing systems, representing differing degrees of abstractness. Words presented in ideographic script were remembered better than alphabetic script. Concrete words were recalled but not recognized better than abstract words. No significant interaction occurred between system and concreteness on any measure.

EHRI, LINNEA C., & WILCE, LEE S. Does word training increase or decrease interference in a stroop task? *Journal of Experimental Child Psychology,* April 1979, *27,* 352-364.

Examines the degree of interference brought about by a word training task on the facility of first and second graders involved in a picture-naming task. Subjects learned and practiced twenty words; of interest was whether training would enhance or diminish the interference created by these words in the picture-naming task. Results indicated that subjects who learned to recognize unfamiliar distractor words more accurately suffered more interference after training. In contrast, subjects who were already familiar with the words and learned to recognize them faster experienced less interference following training.

WILLOWS, DALE M. Individual differences in distraction by pictures in a reading situation. *Journal of Educational Psychology,* October 1978, *70,* 837-847.

Examines the degree to which adjunct pictures influence the decoding abilities of third graders. Subjects were required to read easy, moderate, and difficult one-syllable words under each of three conditions: a control condition with no pictures, an identifying picture condition, and unrelated picture condition. Prior to the experiment, all children were tested with the Comprehension subtest of the *Gates-MacGinitie Reading Test*. Reaction time for decoding words and errors made were recorded on all subjects, both in baseline condition and with adjunct pictures present. The results showed that the reading performance of poor readers as a group was influenced by pictures under all conditions, while that of normal and good readers was much less affected by them. There were marked individual differences, however, among the poor readers in the degree of their susceptibility to distraction by adjunct pictures.

POSNANSKY, CARLA J., & RAYNER, KEITH. Visual-feature and response components in a picture-word interference task with beginning and skilled readers. *Journal of Experimental Child Psychology,* December 1977, *24,* 440-460.

Reports a series of four experiments with fifty-two students, age 6, 8, and 11, in which reaction times for naming line drawings were analyzed as a function of the similarity of the print superimposed on the drawings to the printed label for the drawings. This effect was studied as a function of age and, hence, reading experience. The studies were designed to determine more precisely the characteristics of the stage of visual feature analysis of word identification and to examine response competition factors in this interference task. Results indicated that a combination of end letters and word shape was important for word identification and that response articulation was a significant, distinct interference component in the present task.

HOGABOAM, THOMAS W., & PERFETTI, CHARLES A. Reading skill and the role of verbal experience in decoding. *Journal of Educational Psychology,* October 1978, *70,* 717-729.

Reports three experiments using 104 third and fourth graders in which the decoding speeds of subjects were studied relative to their reading ability. In Experiment 1, differences between skilled and less skilled were found to be greater with pseudowords and 2-syllable units than with English words and one-syllable units. Subsequent experiments provided all readers with various types of experience with pseudowords prior to two decoding tests: vocalization latency and same-different decisions. Aural and printed experience with pseudowords provided significant increases in decoding speeds for both readers groups, but providing meanings for pseudowords as part of the experiences added nothing. These effects were still present after ten weeks.

ALLINGTON, RICHARD L. Word identification abilities of severely disabled readers: a comparison in isolation and context. *Journal of Reading Behavior,* Winter 1978, *10,* 409-416.

Compares the performance of sixteen subjects, grades 3 through 6 with two-plus years underachievement in reading, on oral pronunciation accuracy of isolated words and words read in passage context. No notable difference between tasks were identified for total sample. Individual differences in consistency of word errors and within-subject superiority of isolated word or word-in-context conditions were reported.

CAMPBELL, DOROTHY. Type of stimulus condition and learning disabled and normal pupils' reproduction and recognition of new words. *Journal of Research and Development in Education, 9,* Monograph 1976, 30.

Studies the efficiency with which normal readers and learning disabled (LD) pupils learn to recognize words under two different conditions. Two presentation conditions were used as treatments: 1) subjects scanned graphic forms as the experimenter pronounced first the word and then its letters; and 2) subjects traced each new grapheme as the experimenter presented words and letters orally. Responses were either by recognition or reproduction. Subjects were presented with ten high frequency English words paired with new forms of the words written in letters of the Armenian alphabet. No significant differences were found between the two treatments for either reproduction or recognition. Normal readers reproduced more new forms than did LD pupils. No groups x treatments interaction was found. No significant interaction between groups, trials, and treatments was noted.

GEISELMAN, RALPH E., & GLENNY, JANET. Effects of imagining speakers' voices on the retention of words presented visually, *Memory and Cognition,* September 1977, *5,* 499-504.

Investigates the influence of tape recorded male or female voice set and subvocal repetition of words visually presented on memory of words by fifteen undergraduate males and fifteen undergraduate females. Subjects were introduced to male and female voices by tape recording. Slides were color coded to cue subject to imagine a word being read by male, by female, and by self. Main effects of repetition mode and test mode were not significant. However, significance was obtained between same sex of imagined reader and voice on test tape. Recognition of words encoded in own voice was not influenced by sex of voice on test.

McCLELLAND, JAMES L., & JOHNSTON, JAMES C. The role of familiar units in perception of words and nonwords. *Perception and Psychophysics.* September 1977, *22,* 249-261.

Reports on two studies of the effects of familiarity of whole-word units and letter-cluster units in the perceptual encoding of letter strings. College students (N=24 and 12) viewed brief, masked presentations of words and pronounceable pseudowords differing in letter-cluster frequency. Identification of both display types was compared to control single letters. Perceptual accuracy was indexed by probe forced-choice responses and full verbal reports of the displays. Mixed but favorable evidence was obtained that whole-word units facilitated encoding. Letter-cluster units did not facilitate encoding.

JOHNSON, NEAL F., & MARMUREK, HARVEY H. C. Identification of words and letters within words. *The American Journal of Psychology,* September 1978, *91,* 401-415.

Describes three experiments treating the manner in which letters are identified within the structure of a word. Subjects consisted of eighteen undergraduates. With minor variations, materials and procedures for the three experiments were similar and involved influence on subject search for word and letter targets in decks of words after tachistoscopic recognition of predetermined targets. Results indicate that identification speed is facilitated by specification of written-word position of target item, and that for these subjects, words are processed as single perceptual patterns rather than as integrated collections of individual letters.

BARON, JONATHAN, & HODGE, JUNE. Using spelling-sound correspondences without trying to learn them. *Visible Language,* Winter 1978, *12,* 55-70.

Investigates the transfer effect in the learning of associations between printed and spoken words with fifty-two adult subjects. Subjects learned spoken responses to nonsense words written in an artificial alphabet. Even though subjects did not notice the existence of correspondences, they were able to decode new nonsense words in the same alphabet. In a second experiment, nonsense words written with hidden correspondences were read more quickly than nonsense words without correspondences. A final experiment suggested that this effect was due to the fact that similar words had similar responses. The authors discuss the application of the results to the teaching of correspondences between written and spoken words.

CARR, THOMAS H.; DAVIDSON, BRIAN J.; & HAWKINS, HAROLD L. Perceptual flexibility in word recognition: strategies affect orthographic computation but not lexical access. *Journal of Experimental Psychology: Human Perception and Performance.* November 1978, *4*, 674-690.

Explores the flexibility of processes underlying word perception in four tachistoscopic forced-choice recognition experiments with 153 college subjects. Stimuli consisted of words, orthographically regular but unfamiliar pseudowords, and orthographically irregular nonsense strings. In the first two experiments, subjects knew that several different kinds of stimuli would occur in each block of trials and that one kind would occur much more often. In the third and fourth experiments, subjects were led to believe that only one stimulus type would occur but were shown another type during trial presentations. In both experiments words were identified more accurately than nonsense strings, and the size of the effect was independent of subject expectations. However, when either words or nonsense strings were expected exclusively, pseudoword accuracy did not differ from nonsense accuracy; only when subjects knew that pseudowords would occur did they identify them more accurately than nonsense strings. The authors discussed the existence of two independent encoding mechanisms that operate during tachistoscopic recognition.

MEWHORT, D.J.K., & BEAL, A. LYNNE. Mechanisms of word identification. *Journal of Experimental Psychology: Human Perception and Performance*, November 1977, *3*, 629-640.

Analyzes in three experiments the mechanisms of word identification using sixty-four college subjects. Experiment 1 presented subjects with words in a CRT display, their task being to identify the words as quickly as possible. Words were presented normally and in reversed letter sequence. Results indicated that the order of letter report depended upon the rate of presentation in the right-to-left sequence, but not in the left-to-right sequence; further, letter accuracy di[illegible]llel word accuracy. In Experiment 2, words were presented to subjects [illegible] of letters corresponding to syllable divisions or cutting across syll[illegible]ndaries. Overall, presentation of words in syllabic form yielded fewer errors than presentation in nonsyllabic form. However, when the same procedure was used presenting the words vertically rather than horizontally in Experiment 3, presentation in nonsyllabic form yielded word identification equivalent to that in syllabic groups.

BROWNING-CRINION, CHRISTINE; DOLMETSCH, ROBERT; & MAYZNER, M. S. Variability in word-recognition performance. *Bulletin of the Psychonomic Society,* April 1978, *11,* 212-214.

Examines variability in performance of a word recognition task with fifty adult subjects. A total of 220 words, four, five, or six letters in length, from the Kucera-Francis word list were used as stimulus words in the present study. Words were presented by way of a cathode ray tube display system for 40 msec, followed immediately by a 500 msec noise field or mask. After each display, subjects were asked to write the word or as many letters of the word as they could. Confirming the results of earlier studies, it was found that subjects exhibited very large individual variabilities in word recognition performance. Increases in word frequency led to significant increases in word recognition scores, while increases in word length led to small and insignificant increases in word recognition scores.

BUTLER, BRIAN, & HAINS, SYLVIA. Individual differences in word recognition latency. *Memory and Cognition,* March 1979, *7,* 68-76.

Examines the ability of twelve college students in each of two experiments to name words and make lexical decisions. Stimuli consisted of an unrestricted set of words; individual differences were considered using a measure of the subjects' knowledge of the English vocabulary. The results of Experiment 1 indicated that word naming is affected by word length, word frequency, and the number of syllables. The results of Experiment 2 confirmed the effects of length and frequency, but also showed that reaction time is a function of the age at which the word is introduced to a child's reading vocabulary. Subjects with a high vocabulary score were faster in Experiment 1 but slower in Experiment 2, compared to subjects with a low vocabulary score. High-vocabulary subjects in both studies were less affected by word length than the low-vocabulary subjects.

BOUWHUIS, DON, & BOUMA HERMAN. Visual word recognition of three-letter words as derived from the recognition of the constituent letters. *Perception and Psychophysics,* January 1979, *25,* 12-22.

Examines the letter recognition ability of eleven subjects in an effort to verify the letter confusion model of word recognition. Subjects were presented sets of 3-letter words and were asked to report both the initial and final letter of the presented unpronounceable letter string. In the later supplementary experiment, designed for a further test of the model, subjects reported only the middle letter. Results of the study indicate the importance of the constituent letters in the perception of words, but do not indicate that letters are the ultimate features for word perception.

IV-10 Factors in interpretation

Chodos, Laura, & Mosenthal, Peter. Fourth graders' comprehension of story structures under three recall conditions. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978. 125-132.

Investigates the function which schemata play in the reading comprehension of stories under different comprehension conditions with thirty fourth graders. A story from a fourth grade social studies text was rewritten into four smaller stories, each containing a setting, beginning, development, and ending. Each of these story structures contained three events, each of which consisted of eleven propositions; words in the propositions were controlled for frequency and imagery value. Each student was given a written recall test and a cued recall test after reading; eight days later, all subjects were asked to recall as much as they could about the four stories. Protocols were scored by two raters for number and correctness. The findings of the study supported the notion that children employ schemata in comprehending written stories much the same as they do in comprehending spoken stories in immediate recall. Schemata appear to be processed hierarchically, serving also to temporally order categories recalled. Temporal effects were somewhat different in delayed recall.

Krulee, Gilbert K.; Fairweather, Peter G.; & Bergquist, Sidney R. Organizing factors in the comprehension and recall of connected discourse. *Journal of Psycholinguistic Research,* March 1979, *8,* 141-163.

Investigates the ability of thirty-one college students in two experiments to utilize organizational form of prose materials and style of prose materials in comprehension and recall. Prose materials varied in style and were descriptive, abstract, and technical. The organizational form of the materials was meaningful, scrambled, and pseudo. In Experiment 1, subjects read the materials, while in Experiment 2, subjects listened to the materials. After reading, subjects were exposed to words and asked to determine if the words had appeared in the reading materials. Recognition accuracy was highest for normal paragraphs and lowest for pseudoparagraphs. Accuracy in recognition was also highest for descriptive materials, and lowest for abstract and technical materials.

Brown, Garth H. Development of story in children's reading and writing. *Theory Into Practice,* December 1977, *16,* 357-362.

Suggests that children develop an internalized representation of story which assists in comprehending, retelling and producing stories. Relevant data are presented.

APPLEBEE, ARTHUR N. A sense of story. *Theory Into Practice,* December 1977, *16,* 342-347.

Suggests that children have a well-developed set of expectations when they encounter a new story. Provides some evidence to support this view. Also summarizes some results of research that addresses the importance of such expectations for learning to read.

BLEAKLEY, JOSEPH J., & JOHNSEN, E. PETER. The comprehension of prose problems in measuring learning outcomes. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978. 166-174.

Proposes a 4-level taxonomy of reading outcomes and cites research that can be classified using the taxonomy. Suggests that more research should be carried out using higher level outcomes.

DI VESTA, FRANCIS J.; HAYWARD, KRISTINA G.; & ORLANDO, VINCENT P. Developmental trends in monitoring text for comprehension. *Child Development,* March 1979, *50,* 97-105.

Compares metacognition and the degree to which it is involved in comprehension with eighty-two secondary, and 132 sixth, seventh, and eighth grade students. A cloze test was devised to measure differences in readers' use of running and subsequent text and was administered to all subjects. The total cloze score was highly correlated with traditional comprehension measures. However, for all subjects the difference in the two scores decreased linearly with increases in reading ability as measured by the *Iowa Silent Reading Test.* Results are discussed with reference to where information is located in text expectations, and learning strategies for sampling information.

KINTSCH, WALTER, & GREENE, EDITH. The role of culture-specific schemata in the comprehension and recall of stories. *Discourse Processes,* January/March 1978, *1,* 1-13.

Examines in two experiments the extent to which the availability of a conventional story schema affects 243 college readers' comprehension, ability to summarize, and sequential recall. It was discovered that readers write better summaries of stories for which they have an appropriate schema than for stories for which they lack a schema, and that this effect is related to the overall organization of the story and does not lie at the single sentence level. Sequential recall of a story which deviated in various ways from the subjects' story schema resulted in poor performance; the stories tended to break up after a chain of five sequential recalls, in contrast to a well-structured, schema-based story that was typically recalled completely without serious distortions.

BRIDGE, CONNIE A.; TIERNEY, ROBERT J.; & CERA, MARY JANE. Inferential operations of children involved in discourse processing. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978, 68-72.

Analyzes how much explicitly stated information thirty-six third graders remembered from a reading passage, how much inferred information they generated during that process, how many total units of information were recalled and the relative proportion of inferred information to total information in their recalls. Subjects were assigned good or poor reading status on the basis of scores from the *Stanford Reading Achievement Test*. Subjects then read a passage and were asked to respond in a free recall and probed recall condition. The semantic and logical network of each recall was then compared item-by-item to the message base of the original passage and scored. Major findings included that both good and poor readers engage in inferential processing during reading and recall and that nearly half of the information in the retelling of a passage is inferred. Additionally, it was concluded that the comprehension process was essentially the same for both good and poor readers.

OLSHAVSKY, JILL EDWARDS, & KLETZING, KAREN. Prediction: one strategy for reading success in high school. *Journal of Reading,* March 1979, *22,* 512-516.

Utilizes two short stories, one abstract and one concrete in style, to compare the performance of 140 tenth and eleventh grade readers in a multiple choice prediction comprehension task. The *Stanford Diagnostic Reading Test,* Level III, was used to form equal sized samples of good readers (stanines 7-9) and poor readers (stanines 2-4). Good readers made significantly more accurate predictions than poor readers on both abstract and concrete stories, and both levels of readers were better at predicting coming events in the concrete story than in the more abstract.

LANTAFF, ROGER E. Two factors affecting text recall. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practive. *Twenty-seventh Yearbook of the National Reading Conference,* 1978. 93-98.

Examines the nature of text recall obtained at different points in time for sixteen graduate students for easy (5.0 to 5.8) and hard (12.8) readability passages taken from public school texts in social studies and science. Passages were analyzed to determine clausal propositions which served as criterion indices. Subjects were directed to skim read, then to carefully reread the passage. Written free recall of four of the five passages was required. Subsequent free recall of all passages was obtained two days later, followed by cued recall one week after original exposure. Analysis revealed a significant difference between different content areas of text. A distinct drop in total and text specific recall occurred between immediate recall and 2-day delayed recall, with little difference occurring between results of the two delayed recall testings. Results suggest text comprehensibility is not synonymous with traditionally determined readability.

FERRIS, DONALD R. The effects of humorous literary content on immediate and delayed reading comprehension. In Clifford Pennock (Ed.) *Reading Comprehension at Four Linguistic Levels.* Newark, Delaware: International Reading Association, 1979. 21-32.

Studies the influence of humorous and nonhumorous literary passages upon the immediate and delayed comprehension of ninety-five second and 111 fourth grade boys and girls of differing socioeconomic status. Passages were constructed of controlled readability, and the comprehension instrument consisted of six content-related items plus one perception of style (true, sad, funny) item. A reverse order administration after a 6-week delay comprised the delayed comprehension condition. Two significant main effects were obtained for grade and for literary content. Immediate and delayed recall were significantly different for grade level and type of comprehension. Sex and SES differences were not significant. The retention of information of humorous passages was significantly higher for both immediate and delayed recall.

OWENS, JUSTINE; BOWER, GORDON H.; & BLACK, JOHN B. The "soap opera" effect in story recall. *Memory and Cognition,* May 1979, *7,* 185-191.

Reports upon two experiments concerning the influence of reader's preset about a character's motivations upon interpretation and recall of simple, colorless narrative. In experiment 1, twelve undergraduate experimental subjects were given character-plus-problem description plus specific reading preset prior to reading; the eight undergraduate control group read without this preset. In experiment 2, seventeen undergraduates participated in reading and memory sessions as in the first experiment, but with greater provision for intrusions, a 24-hour retrieval condition, and a test of cued recognition. Providing the reader with the problem and motive of the character produced significantly more memories and more correct order of memories. The experimental group recalled significantly more propositions prior to cue, but the control group recalled significantly more propositions after cues were provided.

HANNA, GERALD S., & OASTER, THOMAS R. How important is passage dependence in reading comprehension? *Journal of Educational Research,* July/August 1978, *71,* 345-348.

Employs the reading test, Forms 3A and 3B, of the *Sequential Tests of Educational Progress,* Series II, to correlate reading scores of 149 seventh graders and 107 eighth graders answering the test (items) with or without access to the reading selections. Kuder-Richardson coefficients were .89 and .90 for the 'with selection' condition and .50 and .58 for the 'without selection' condition. Notable and significant differences favored the mean performance of 'with passage' condition on both forms of the test. No significant grade level or sex differences emerged from the analysis.

GAGNE, ELLEN D., & MEMORY, DAVID. Instructional events and comprehension: generalization across passages. *Journal of Reading Behavior,* Winter 1978, *10,* 321-335.

Examines post-reading comprehension in the form of free recall, application, main idea, and factual questions for sixteen cause-effect or causal chain of events passages drawn from sixth grade reading, science, and social science textbooks. Subjects consisted of 224 sixth graders divided into three reading level groups by comprehension performance on the *Gates-Macginitie*

Reading Test. Treatments consisted of seven different types of passage prereading instructions: 1) read carefully, 2) form imagery, 3) factual prequestion, 4) application prequestion, 5) main idea prequestion, 6) supplemental background provision, and 7) supplemental causal relationship example. The hypothesis that prereading direction would influence significantly the nature of postreading comprehension was upheld for the factual prequestion condition. General comprehension was greater for conditions 2 (imagery), 4 (application), and 7 (causal example).

EGGEN, PAUL D.; KAUCHAK, DONALD P.; & KIRK, SANDRA. The effect of hierarchical cues on the learning of concepts from prose materials. *The Journal of Experimental Education,* Summer 1978, *46,* 7-11.

Investigates the influence of two conditions of supplemental aid in the form of conceptual hierarchy upon the reading of a 1,000-word passage by twenty-two fourth, twenty-one fifth, and twenty-two sixth graders randomly divided into two experimental and one control groups. The provided hierarchy (PH) group was provided a supplemental hierarchy inserted aid system of five text insertions. The derived hierarchy (DH) group was asked to derive the hierarchy at five significant points in the text. The criterion test consisted of forty-two items stressing recognition of data presented, production of hierarchial concepts, and comprehension obtained for the production and comprehension subtests. The PH group results were significantly better than the control group for these subtests. Inability to perform the derived hierarchy task by some subjects confounded the results for that experimental variable.

EAMON, DOUGLAS B. Selection and recall of topical information in prose by better and poorer readers. *Reading Research Quarterly,* 1978-79, *14*(2), 244-257.

Describes the nature and results of two experiments concerning the differential processing of paragraph information. College students scoring highest and lowest on the *Iowa Silent Reading Tests-Advanced,* (N = 14/14 and 16/16), were compared in evaluation of theme importance and recall of theme related data. Statements following the reading of paragraphs were constructed to differentiate between asserted attributive (AA), asserted transitive (AT) and inferred transitive (IT) information. Theme related vs. non-theme related concepts were found to be significant in both identification ratings and recall. Statement type differences were significant; AT statements being judged most important and AA least important. Interaction occurred between reading ability and theme identification. Better readers differentiated and recalled more distinctly between theme/non-theme concepts than poorer readers.

BALDWIN, R. SCOTT, & READENCE, JOHN E. Critical reading and perceived authority. *Journal of Reading,* April 1979, *22,* 617-622.

Discusses the relationship of critical reading in terms of the reader's set and sophistication as related to the findings of an exploratory study of the performance of twenty-seven education major undergraduates and thirty-five graduate reading majors at two universities. Subjects read three professional journal articles, one a contrived satire and two straight articles serving as foils. Response was given in the form of a structured journal review. Intent of the study was masked. Only three of the sixty-two subjects recognized the satire. Twelve subjects considered the satire to be a legitimate, important report of research.

DRUM, PRISCILLA A. Prose recall responses and categories for scoring. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978. 88-92.

Categorizes prose recall responses of sixteen grade 8 students into classifications based upon an analysis of comprehension responses as interactions between what was known before reading and what the text stated. Subjects were divided into able and below average readers based on scores on the *SRA,* Form E, reading comprehension section. Text responses were categorized as text specific, text entailed, text evoked, or text external responses. Four passages from science and social studies were used; passages were analyzed into proposition hierarchies and ranged in readability from 7.4 to 8.0. After reading a passage, each subject was asked to orally recall the information. A day later, delayed recall for two passages was taken; a week later, the remaining two. Recalled propositions were categorized by three people. Able readers were more likely to bring together information from all parts of the passage, to make text derived inferences, to add case-linked arguments, and to remember more text responses at both immediate and delayed recall. Less able readers appeared to divide into two groups: those that stated a text proposition and then repeated it, or those who picked up one idea and then elaborated on it though there was no apparent relationship to the text in the elaboration.

EVANS, BETH DEFRATIS. A study of what Chicano and Anglo children remember about the stories they read and hear (abstracted). *Reading Research Quarterly,* 1978-79, *14*(2) 272-276.

Examines the language comprehension of sixty-four third and sixth graders. Subjects were stratified on the basis of sex, ethnicity (Chicano or Anglo), and reading ability (high or low). Subjects read or listened to passages, then responded with immediate recall of the passage, and delayed recall 24 hours later. There were two types of story presentations and two types of study conditions (reading/listening or discussion study). Three sets of dependent measures were obtained at two points. Older and more capable readers recalled more information; males remembered more than females. One of the four stories elicited more propositional and surface structure responses than the other stories at both the immediate and delayed recall test points. Generally, the remaining three stories provoked fairly equivalent responses. The story and study conditions produced no significant effects on the propositional and surface structure analyses.

NOLAN, JOHN D.; HAVEMEYER, EUGENIE; & VIG, SUSAN. Mature and young adult women's recall of textbook material. *Journal of Educational Psychology,* October 1978, *70,* 695-700.

Analyzes the immediate and delayed, cued and free recall of two age groups of college educated female subjects based upon the reading of two historical passages, one dealing with an event occurring during the life span of the older subjects. N consisted of thirty subjects ages 18-25 years and thirty-two subjects ages 35-55 years. No significant difference in WAIS vocabulary mean group score was revealed. Subjects study-read passages and responded through free and then cued (12-question) recall. After one week delay they attempted a second recall. A significant higher immediate free recall was obtained for the younger subjects. No between-group differences occurred for the delayed free recall. Mean score differences on cued recall were not significant for either group in both passages.

LEVIN, JOEL R., & LESGOLD, ALAN M. On pictures in prose. *Educational Communication & Technology*, Fall 1978, *26*, 233-243.

Documents the positive value of pictures for prose-learning.

THOMAS, JAMES L. The influence of pictorial illustrations with written text and previous achievement on the reading comprehension of fourth grade science students. *Journal of Research in Science Teaching*, September 1978, *15*, 401-405.

Assesses the influence of accompanying illustrations upon the literal and inferential comprehension of three levels of fourth grade pupils. One hundred and eight subjects were divided into three groups using combined scores on the *SRA Assessment Survey* and reading and science measures: high (81 percentile or above) middle (80 to 40 percentile) and low (39 percentile and below). Experimental materials were drawn from four fourth grade science texts. Experimental conditions consisted of text with original color photographs, text with simplified line drawing, and text with no illustration. Analysis of variance revealed significant differences between levels (of readers) but not between treatments (use of illustrations).

STICE, CAROLE KIRCHNER. The relationship between comprehension of oral contrastive stress and silent reading comprehension. *Research in the Teaching of English*, May 1978, *12*, 137-142.

Examines the relationship between silent reading comprehension and unmarked intonation patterns with 324 sixth graders. The measure of silent reading comprehension was the silent reading subtest from the *Comprehensive Test of Basic Skills*. Subjects were also administered a test of oral contrastive stress wherein they were read sixty-four sets of sentence types with the speaker manipulating the element of primary stress to form meaningful changes or contrasts among the sentences (e.g., Let *me* see the picture; Let me see the *picture*; Let me *see* the picture.) The test of contrastive stress required subjects to determine which of three versions of each of the sixty-four sentences was the most appropriate way to word the sentence in response to a particular question. Findings indicated that those subjects who usually have the most success comprehending the written language also have the most success comprehending the element of oral contrastive stress; however, mean scores for comprehension of contrastive stress for the entire sample were low.

SILVA, GEORGETTE, & MONTGOMERY, CHRISTINE A. Knowledge representation for automated understanding of natural language discourse. *Computers and the Humanities,* July/August 1977, *11,* 223-234.

Sketches some current approaches to representing linguistic and real-world knowledge and the use of such knowledge representations in computer systems for discourse comprehension.

WAERN, YVONNE. Comprehension and belief structure. *Scandinavian Journal of Psychology,* 1977, *18,* 266-274.

Analyzes the effect of the belief structures of twenty college students on the subsequent way subjects interpret information obtained from reading. The experimental task involved matching single statements to a previously read text. The statements represented two different ideas, whereas the text represented only one. The readers' belief structure in terms of statements accepted (truth value) and statements discriminated as to truth value (discrimination index) was related to the way in which they matched the same statements to the previously read text (comprehension). Truth values and discrimination indices together were found to account for 39 percent of the interindividual variation in comprehension after the first reading and for 50 percent of the variation after the second reading. The author suggested that, when confronted with a new text, the reader arrives at the most likely interpretation of that text by turning to his/her own belief structure.

KOZMINSKY, ELY. Altering comprehension: the effect of biasing titles on text comprehension. *Memory & Cognition,* July 1977, *5,* 482-490.

Examines the effect of altering text titles on the subsequent comprehension of forty-five college subjects. Subjects were exposed to three passages differing in context and structure; texts were classified as descriptive, report, and narrative. Three titles were constructed for each text. Two of the titles were biasing titles and the third was a combined title representing parts of the first two. Each subject was asked to read and recall the three texts. Results indicated that immediate free recall is biased toward the theme or main idea emphasized in the title. The author develops a schema of the comprehension process which is guided by the text's thematical information.

FURUKAWA, JAMES M. Cognitive processing capacity and learning-mode effects in prose learning. *Journal of Educational Psychology,* December 1977, *69,* 736-743.

Studies cognitive processing capacity (CPC) and learning mode effects on prose learning in two experiments with 213 college students. Subjects studied prose materials in one of four learning modes: no modification of the prose article, chunking study outline with headings and key words listed, programmed instruction with the article segmented into seven sections, and a list of adjunct questions following the article. To measure CPC, adjective-noun pairs were presented by an overhead projector for one minute, after which subjects had a 2-minute free recall period. Results showed high CPC students to have an advantage over low CPC students. Also, programmed instruction was found to be better than control, chunking study outline, and adjunct questions on both immediate and delayed posttests. However, substantial CPC and performance correlations and poor long term retention indicated that programmed instruction may not have been best for low CPC subjects. The second experiment confirmed these findings.

DOCTOROW, MARLEEN; WITTROCK, M. C.; & MARKS, CAROLYN. Generative processes in reading comprehension. *Journal of Educational Psychology*, April 1978, *70*, 109-118.

Examines the effect of generating original elaborative sentences from memory on reading comprehension among 488 sixth graders. Subjects were given passages to read containing no headings, 1-word, or 2-word headings for each paragraph. One-word headings consisted of synonyms for the most frequently appearing nouns in each paragraph. Two-word headings were constructed by combining the most frequent noun and a synonym for the most frequently occurring direct object or subject. In variations of the experimental treatment, subjects were required to generate their own sentences about what happened in the paragraph after they read each paragraph of the story. Comprehension tests were administered following reading. It was found that the facilitation of generative processes by the insertion of paragraph headings and instructions to generate sentences about the story paragraphs during reading produced the greatest comprehension, followed in turn by instructions to generate sentences, the insertion of paragraph headings, and then by reading the same stories without generative instructions or paragraph headings. The combination of inserted paragraph headings and instructions to generate sentences about paragraphs approximately doubled comprehension and recall in each experiment.

KIERAS, DAVID E. Good and bad structure in simple paragraphs: effects on apparent theme, reading time, and recall. *Journal of Verbal Learning and Verbal Behavior*, February 1978, *17*, 13-28.

Examines the effect of unconventional paragraph structure, deviating from the typical topic sentence as first sentence pattern, on the reading time, recall, and recognition of main idea among eighty-five adults in three experiments. Subjects read passages that violated normal paragraph structure, presented one sentence at a time. The results indicated that bad paragraph structure produced fewer choices of the topical proposition as the best title; longer reading times, especially with regard to the initial incoherent sentences; and lower recall of passage content. Increased processing load caused by unintegrable input of initial incoherent sentences is discussed.

BALDWIN, R. SCOTT, & COADY, JAMES M. Psycholinguistic approaches to a theory of punctuation. *Journal of Reading Behavior*, Winter 1978, *10*, 363-375.

Examines in two repeated measures experiments how twenty fifth graders and twenty college students utilize punctuation as psycholinguistic cues to reading. In the first study, above average fifth graders were exposed to sets of isolated sentences; word order conditions were manipulated to vary the criticalness of individual punctuation cues. An identical experiment with adults followed. The combined results of the two experiments indicated that individual punctuation marks varied from critical to redundant as a function of preceding word order, and that fifth graders, in contrast to adults, tended to ignore grammatically critical punctuation cues. Results suggested that punctuation is a late developing cue system in reading and that traditional punctuation rules are empty conventions which neither predict nor explain reading behaviors involving punctuation.

EVANS, RONALD V. The relationship of reading comprehension to written production of transformationally lengthened prose. *Journal of Reading Behavior*, Fall 1977, *9*, 295-300.

Investigates the relationship between the comprehension and production of syntactic transformations in the reading and writing of thirty eighth graders, thirty twelfth graders, and thirty college students. All subjects read nine common prose passages, responded to these passages on cloze tests, and rewrote a paragraph consisting of short, simple sentences on which no transformations had been performed. The cloze test responses and three factors of syntax were then analyzed to determine if there were any correlations between them. The cloze tests scores were compared to sentence-lengthening criteria in a multiple regression analysis. Cloze test scores did not satisfactorily predict sentence length. However, there was strong evidence to suggest that cloze tests may not be valid measures of advanced reading comprehension and that higher cloze scores predicted lower sentence-lengthening criteria.

HAYES-ROTH, BARBARA, & THORNDYKE, PERRY W. Integration of knowledge from test. *Journal of Verbal Learning and Verbal Behavior*, February 1979, *18*, 91-108.

Investigates in three experiments factors that influence the integration of factual information from text with 139 college subjects. Experiment 1 examined integration of two constituent facts into a single higher-order knowledge structure. Integration was measured by the ability to detect that case fillers from separately acquired facts were part of a single case frame and the ability to retrieve case fillers from separate facts given only the common case frame for the two facts. Integration was found to be facilitated by proximity of related facts and by identical, rather than paraphrased, words of the common case frames in related facts. Experiment 2 demonstrated that integrated memory representation preserved the identities of the original constituent facts. In Experiment 3, integration was measured as the ability to verify inferences deducible from separately acquired facts; this type of integration was also facilitated by identical wordings of the common information in related facts. Experiment 3 also showed that the observed effects persisted after a 30-minute retention interval.

VERDAASDONK, H., & VANREES, C. J. Reading a text vs. analyzing a text. *Poetics*, March 1977, *6*, 55-76.

Discusses some problems inherent in two representative attempts to develop a theory of the "reception" of literary texts. Proposes a concept of the reading process which makes it possible to avoid the problems that are pointed out.

REED, KATHLEEN. Improving comprehension in content areas through questioning strategies. *The New England Reading Association Journal,* 1979, *14*(2), 29-36.

Discusses questioning techniques that can help students to become more actively involved in thinking/reading processes. Some research is cited.

GRIGGS, RICHARD A. Drawing inferences from set inclusion information given in text. In Russel Revlin & Richard E. Mayer (Eds.) *Human Reasoning.* New York: John Wiley & Sons, 1978. 163-183.

Examines some recent conflicting findings about drawing inferences from paragraphs of text. A series of experiments are described which investigate the processing of set inclusion information and which attempt to resolve previous conflicting results.

MARSHALL, NANCY, & GLOCK, MARVIN D. Comprehension of connected discourse: a study into the relationships between the structure of text and information recalled. *Reading Research Quarterly,* 1978-79, *14*(1), 10-56.

Presents a study of text manipulated structure in the manner of Fredericksen's model of semantic structures, a model of discourse production, and a model of the communication process as it relates to language and memory. A total of 160 undergraduates (112 community college and forty-eight university) read passages manipulated to present such structure differences as explicit or implied *if-then* relations, complexity of adjectives, location of main idea, and location of clauses. Criterion measures consisted of free recall and twenty open-ended probe recall question products. The university Ss produced recalls which were significantly more complete. Probed recall was significantly more complete than free recall. The performance of the community college Ss was consistent with that hypothesized by models of discourse production and semantic structures.

REDER, LYNNE M. The role of elaborations in memory for prose, *Cognitive Psychology,* April 1979, *11,* 221-234.

Orthogonally investigates the relationship of memory of prose information to inherent plausibility of queried statements, amount of attention focused on necessary contributing information, and interval between exposure to story information and test probe. The first experiment involved forty-four students reading ten stories with nine inference probes for each story inserted (immediate condition) and given after the story (delay). An error rate of 10 percent was obtained for both immediate and delay conditions. Prior exposure, high plausibility statements, and immediate probing all produced significantly faster reaction. The second experiment employed forty-two subjects and differed from the first experiment by introducing a title prior to reading. Probes were distributed over three delay periods, including a 48-hour post-reading reaction to questions. Significant differences were obtained for inference type, prior exposure, and amount of delay. Inference type did not interact with prior exposure.

SMITH-BURKE, MARGARET; GINGRICH, PATRICIA S.; & EAGLEEYE, DANIEL. Differential effects of prior context, style and deletion pattern on cloze comprehension. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978. 133-137.

Examines the effects of style of writing (narrative or expository); deletion pattern (one-fifth or function words), and amount of prior context (cloze passage, 250, and 500 words of prior context) on cloze comprehension performance of ninety-three eleventh and twelfth grade subjects on six selections. A counterbalanced, split-plot design was used. Preliminary investigations revealed no differences attributable to sex or grade. Analysis of variance revealed no significant main effects. Reanalysis of the data using a lexical marker-transfer stratagem produced significance for style and type of deletion. Under this analysis, narrative and function word cloze produced higher scores.

HUMES, ANN. Structures, signals, and cognitive processes in context clues. *Research in the Teaching of English,* December 1978, *12,* 321-334.

Analyzes the contextual word cue patterns of eighteen textbooks, grades 4-8. Eleven contextual-clue structures (direct explanation, appositive, restatement, contrast, groupings, example, comparison, description, function, cause-effect, and grammatical phrase) are identified according to the dominant cognitive processes involved (coordination, classification, and attribution). Each contextual structure is explained and illustrations are provided. Analysis suggests need for refinement and revision in identification of contextual clues in written language.

WEST, RICHARD F., & STANOVICH, KEITH E. Automatic contextual facilitation in readers of three ages. *Child Development,* September 1978, *49,* 717-727.

Examines differential use of developmental changes in the influence of sentence context during reading for forty-eight fourth graders, forty-eight sixth graders, and forty-eight college students. Subjects performed three tasks preceded by a congruous, incongruous, or no-sentence context. Congruous contexts facilitated the reading times of all three groups. Incongruous contexts slowed the responses of the fourth and sixth graders, but not those of the adults. In the second task in which subjects had to identify the color in which the target word was printed and in the third task, the findings indicated that context effects are mediated, at least in part, by automatic processes. However, the relative importance of these automatic contextual processes appears to decrease with age and reading ability as automatic word recognition processes become more dominant.

CHRISTOPHERSON, STEVEN L. Effects of knowledge of semantic roles on recall of written prose. *Journal of Reading Behavior,* Fall 1978, *10,* 249-256.

Examines the effect on recall of the knowledge of semantic roles in written prose with thirty-four college subjects. Experimental subjects were taught semantic roles, such as Agent, Object, and Instrument. Controls read materials without this knowledge. Delayed recall of prose which was read after learning semantic roles was significantly better than delayed recall by a control group. Immediate recall was not significantly affected. When the semantic roles were learned after the prose reading and before recall, no significant effects were revealed, indicating that the influence of semantic roles occurred at the time of reading the prose rather than during recall.

CLEMENTS, PAUL. The effects of staging on recall from prose (abstract). *Reading Research Quarterly,* 1978-1979, *14*(1), 8-9.

Examines the effects of the hierarchical structure of prose on recall. Pairs of passages were analyzed for staging structure, wherein distinctions are drawn between topic and comment within sentences and between new information and given information throughout a passage. In four experiments, pairs of passages similar in content but different in staging structure were used. The staging hypothesis was strongly supported by the results. It was shown that staging is a useful theoretical construct for the analysis of prose and has application to the analysis of memory and retrieval processes used in reading.

LEVY, BETTY ANN. Speech analysis during sentence processing: reading and listening. *Visible Language,* Winter 1978, *12,* 81-102.

Investigates aspects of where meaning analyses occur during reading and the extent to which speech recoding in working memory affects meaning analyses; fifty-eight college subjects participated in the experiment. Subjects were assigned to one of two groups: a lexical-semantic group wherein subjects attempted to detect changes that occurred in target sentences, and a paraphrase group within which subjects decided whether changes made in the target sentence maintained or altered sentence meaning. Subjects were shown cards on which sentences were typed at the rate of one card every two seconds. Results indicated that disrupting wording information in memory did not lead to semantic comprehension deficits, suggesting that reading does not occur by converting visual signals into speech code until comprehension occurs. Models of visual language processing are discussed in relation to the findings of the study.

BLACHOWICZ, CAMILLE L. Z. Factors affecting semantic constructivity in children's comprehension. *Reading Research Quarterly,* 1978-79, *14*(2), 165-181.

Investigates the ability of 150 second graders through adult readers to draw inferences from reading and examines the effect of directions for the comprehension task on inferential comprehension. Comprehension tasks involved subjects in reading textual materials for inference recognition under two sets of directions: literal (i.e., "What did the story say?" directions, and directions stressing meaning (i.e., "Which of these statements agree with the meaning of the story?"). There were two text-availability conditions in the latter task—text present during the task and text absent during the task. Younger and older subjects performed better than middle grade subjects in the inference recognition task. The directions with which the comprehension task was presented affected the performance of readers; in the literal condition, the directions resulted in a masking of the constructivity which had been displayed by the same subjects in the earlier comprehension task.

MALGADY, ROBERT G., & JOHNSON, MICHAEL G. Modifiers in metaphors: effects of constituent phrase similarity on the interpretation of figurative sentences. *Journal of Psycholinguistic Research,* January 1976, *5,* 43-52.

Investigates the effects of adding adjective modifiers to the nouns constituting metaphorical sentences with 202 college students. Four types of associative relationships between adjectives and nouns were defined. It was found that different patterns of adjective modification influenced constituent phrase similarity, and that such differences were consistent with changes in metaphor goodness and interpretability. However, the intercorrelations among these variables were a function of the level of similarity between unmodified constituent nouns. With initially similar constituent nouns, the three variables were about equally intercorrelated. With initially dissimilar constituent nouns, constituent phrase similarity and metaphor goodness were highly correlated, but interpretability was not predictable from a linear model.

WILDMAN, DANIEL M., & KLING, MARTIN. Semantic, syntactic, and spatial anticipation in reading. *Reading Research Quarterly,* 1978-79, *14*(2), 128-164.

Proposes alternative strategies that a reader might use to anticipate semantic, syntactic, and spatial features of upcoming text; and explains how such anticipation could enhance the reading process. Critically reviews studies on semantic and syntactic ambiguity, eye movements, oral reading errors, and other related areas for oral reading errors, and other related areas for their implications concerning anticipatory behavior.

IV-11 Oral reading

KIBBY, MICHAEL W. Passage readability affects the oral reading strategies of disabled readers. *The Reading Teacher,* January 1979, *32,* 390-396.

Applies the grammatical relationship index of the *Reading Miscue Inventory* to the oral reading performance of forty-six fourth through seventh grade disabled readers on two passages of the Spache *Diagnostic Reading Scales.* Findings support the hypothesis that difficulty of a reading passage has a significant effect on the reader's strategies. On difficult passages, those exceeding the *Scales* standardized criterion cut-off score, 76 percent of all subjects were classified as weak in grammatical relationships. On the less difficult passage, only 2 percent (one subject) was so classified.

OLSHAVSKY, JILL EDWARDS. Comprehension profiles of good and poor readers across materials of increasing difficulty. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978, 73-76.

Investigates the ability of six good and six poor eleventh grade readers to adjust their purposeful reading strategies to accommodate materials of increasing difficulty. Good readers were defined as those scoring at stanines 8-9 on the *Stanford Diagnostic Reading Test,* Level III, while the poor reader subjects scored at stanines 3-4. Excerpts from four short stories (Dale-Chall levels 7-8, 9-10, 11-12, and 13-15) were read silently by each subject with verbalized responses elicited after each clause. As passages increased in difficulty, accuracy in paraphrasing clause content decreased, and both good and poor readers used the eleven purposeful comprehension strategies with significantly less frequency.

STANSELL, JOHN C.; HARSTE, JEROME C.; & DESANTI, ROGER J. The effects of differing materials on the reading process. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978, 27-35.

Reports on three serially related investigations of the influence of literary and historical narrative of appropriate reading difficulty upon the reading of six second graders, six ninth graders, and four adults rated as mature by the Gray-Rogers scale. Subjects were interviewed, and then orally read and retold passages. Analysis involved calculation of reading miscues based on a system patterned on the *Reading Miscue Inventory* as supplemented by ten questions assessing passage meaning. Results suggest that the reading processes were relatively stable across materials, that dependency upon within-word cues is increased by perceived difficulty of material, that between-subject differences in cue usage is greater than within-subject differences, that the reader's cue utilization and errors reflect personal concept of the reading process, and that mature readers' word miscues tended to be syntactically and semantically acceptable.

GICKLING, EDWARD E., & ARMSTRONG, DAVID L. Levels of instructional difficulty as related to on-task behavior, task completion, and comprehension. *Journal of Learning Disabilities,* November 1978, *11,* 559-566.

Observes intensively the reading and reading-related behavior of four first and four second graders over a 7-week period as the degree of familiar task elements were varied systematically to meet experimental criteria for frustrational, instructional, and independent performance. Although considerable variation was noted for first and second grade subjects within each measured dimension and condition, marked improvement across the three behaviors of on-task activity, task completions, and accuracy of task comprehension was observed when the task level was improved to instructional and independent levels of familiarity. However, on-task behavior was lower for independent level than for instructional level tasks.

Elgart, Denise B. Oral reading, silent reading, and listening comprehension: a comparative study. *Journal of Reading Behavior,* Summer 1978, *10,* 203-207.

Employs selections from the *Gates-MacGinitie Reading Comprehension Test,* Primary C, in assessing and comparing the influences of three modes of reception (oral reading, silent reading, and listening) upon the comprehension of forty-five third grade pupils. Each test consisted of eight passages with two comprehension questions administered after each passage. A significant performance difference favored oral reading comprehension over silent reading comprehension. Other comparisons did not reach significance.

Christie, James F. The effect of later appearing syntactic structures on children's oral reading errors. *Reading Improvement,* Summer 1978, *15,* 154-156.

Studies the oral reading behavior of twenty subjects, ages 7 and 8, on two 250 word passages, equated for readability and content variables, but differentiated by word ordering which reflected differences in earlier and later developmental use of syntactic structures. Using a modified version of the *Reading Miscue Inventory* as a criterion measure, the subjects made significantly more errors on the passage with later appearing syntactic structures, but no significance was observed between types of errors made.

D'Angelo, Karen, & Wilson, Robert M. How helpful is insertion and omission miscue analysis? *The Reading Teacher,* February 1979, *32,* 519-520.

Examines substitutions, insertions, and omissions made in oral reading to determine their usefulness in miscue analysis. One hundred cases were randomly selected from clinic screening files and substitution, insertion, and omission miscues made at instructional grade levels of one through 8 were examined on ninety-four of the cases. Of a total of 595 miscues, 87 percent were substitutions, 6 percent were insertions, and 7 percent were omissions. Of the thirty-three insertions made, 94 percent did not distort semantics and 82 percent did not distort syntax. For the forty-four omission errors, 93 percent did not distort semantics and 86 percent did not distort syntax. Of the ninety-four cases, sixty-five readers made no insertions and twenty-five made only one. For omissions, there were sixty-five cases who made none and nineteen where only one was made.

READENCE, JOHN E. Cognitive style and oral reading behavior of third grade children. *Reading Improvement,* Fall 1977, *14,* 175-181.

Investigates the relationship between various dimensions of cognitive style and linguistic cue systems readers use to reconstruct meaning from print. Forty-one third graders of average reading ability as assessed with the *Stanford Reading Test* were classified as having an impulsive, reflective, or mixed impulsive-reflective cognitive style. Cognitive style was determined by the use of the *Matching Familiar Figures Test*. Oral reading miscues of subjects were analyzed for graphic and sound similarity as well as for syntactic and semantic acceptability. Multivariate analysis of variance indicated a significant relationship between impulsive, reflective, and mixed impulsive readers in their use of linguistic cue systems. Discriminant function analysis revealed that graphic and sound cues caused the significant effect for cognitive style.

MILLER, JOHN, W., & ISAKSON, RICHARD L. Disruptive effect: a new technique for reading research. *Educational Research Quarterly,* Fall 1978, *3,* 45-51.

Presents three studies in which a disruptive effect technique was used. Confusing elements were interjected into normal text and subjects read the material orally. The degree of resulting disruption was measured by increase of oral reading errors for the immediately surrounding context.

HOCEVAR, SUSAN PAGE, & HOCEVAR, DENNIS. The effect of meaningful versus non-meaningful reading material on oral reading errors in first through third grade children. *Journal of Reading Behavior,* Fall 1978, *10,* 297-299.

Examines the oral reading errors of fifty-four beginning readers at three basal reading levels in order to determine if oral reading proficiency is a function of cognitive structure and prior experience. Children were given meaningful (based on recent concrete experiences) or non-meaningful reading materials. Results indicated that the beginning readers read with 25 percent fewer oral reading errors when the content was meaningfully related to recent concrete experience.

NICHOLSON, TOM. The relative effects of different error types on children's understanding of connected discourse (abstracted). *Reading Research Quarterly,* 1978-79, *14,* (2) 259-264.

Investigates the influence of systematically embedded word errors upon the understanding of connected discourse. Dependent measures consisted of cloze-type explicit comprehension and multiple choice inferential comprehension. Experiment I, in which rate of simulated substitution was varied, employed twelve short narratives, half of which were read by each of eighty (CA = 9) subjects reading at or above grade level. Semantic and visually related errors exerted least influence on the several comprehensions. Nonrelated errors and naturalistic errors were less influential on inferential and broad explicit comprehension than upon explicit dependent comprehension. Inferential comprehension (multiple-choice) was least influenced by all simulated error types. In Experiment II, twenty unskilled readers, CA 9 = 12, read four easy and four difficult stories of the original set. Errors were highly disruptive for strict criterion scoring; less for board criterion scoring.

STANSELL, JOHN C. Instructional needs in secondary reading: an illustrative case study. *Reading World,* December 1978, *18,* 156-165.

Describes a study of one ninth grade student based on interview, oral reading, and retelling data. In describing what she did when she read, the student focused on individual words and their correct pronunciation. An analysis of her oral reading showed that her substitution miscues tended to be similar to the text in terms of graphic similarity, sound similarity, and grammatical function. Meaning was often lost because of the focus on exact pronunciation.

COHN, MARVIN & D'ALESSANDRO, CYNTHIA. When is a decoding error not a decoding error? *The Reading Teacher,* December 1978, *32,* 341-344.

Examines the word recognition errors of 100 randomly selected students, ages 7 to 17. Subjects were asked first to re-try the word, and, if still incorrect, were given a series of questions calling attention to the letters. Over 400 errors were analyzed with 259 corrected on the first try, 149 corrected on the second try, and 111 not corrected at all. The authors felt that lack of knowledge of sound-symbol relationship was responsible for the decoding errors in only a small proportion of cases.

OTTO, JEAN. Reading cue utilization by low-achieving college freshmen. *Journal of Reading Behavior,* Spring 1977, *9,* 71-84.

Describes the utilization of graphic cues by fifty-eight low-achieving college freshmen and relates these data to syntactic and semantic factors. Totally, 541 reading miscues were recorded while subjects read a second and an eighth grade passage; miscues were subsequently categorized into two groups: corrected and uncorrected. Further, miscues were classified based on the extent to which they approached the correct response according to graphic similarity, grammar, and meaning. The results indicated that use of graphics is associated with syntactic and semantic characteristics of the substitutes (miscues). There was also evidence that the use of graphic and grammatical cues varies with the difficulty level of the passage.

HOFFMAN, JAMES V. On providing feedback to reading miscues. *Reading World,* May 1979, *18,* 342-350.

Examines the potential for oral reading with individual students at their instructional level as a means for developing basic word recognition strategies. Discusses the importance of feedback during oral reading on the development of reading proficiency. Cites supporting research.

BILLINGSLEY, FELIX F. The effect of self- and externally-imposed schedules of reinforcement on oral reading performance. *Journal of*

Learning Disabilities, November 1977, *10*, 549-559.

Examines the effect on oral reading performance of different types of reinforcement schedules with eight intermediate grade boys. The students all had reading grade placements based on the *Diagnostic Reading Scales* of one and one-half grades below their expected grade placements. Reading materials for the study were drawn from the Basic Reading series and were approximately two grade levels above the measured reading levels of the students. Subjects were assigned to either an experimenter controlled reinforcement schedule or a self-imposed schedule, wherein the subjects designated oral reading response levels and their equivalency in tokens. Tokens were exchangeable for free time at a variety of game activities. Subjects who had lower verbal IQ's appeared to profit most from self scheduling, while external scheduling appeared to benefit low achievers the most.

BEAN, THOMAS W. Oral reading miscues of Hawaiian Islands dialect speakers in grades four, five, and six. *Reading Improvement*, Summer 1978, *15*, 115-118.

Analyzes the oral reading miscues of fifty Hawaiian children in grades 4, 5, and 6. Students were identified as average and below in reading achievement based upon standardized tests and teacher ratings. The *Hawaiian Dialect Proficiency Assessment* was used to identify proficient dialect speakers. Miscues were analyzed and compared using the *Reading Miscue Inventory*. A statistically significant interaction was found between oral reading strategies used and grade placement. Fourth graders were found to rely more heavily on graphic and sound cues in their oral reading than fifth and sixth graders. Fourth and fifth graders were less adept in the application of semantic cues than were sixth graders. Dialect tended to play a neutral role in oral reading strategies.

LAMBERG, WALTER J. Assessment of oral reading which exhibits dialect and language differences. *Journal of Reading*, April 1979, *22*, 609-616.

Summarizes studies concerned with prospective teachers' treatment of dialect differences while assessing oral reading performance.

MACKWORTH, NORMAN H. The line of sight approach. In Stanley F. Wanat (Ed.) and Roger W. Shuy (Gen. Series Ed.) *Linguistics and reading Series: 2*. Arlington, Virginia: Center for Applied Linguistics, June 1977. 1-22.

Examines the reading aloud fixation time (RAFT) phenomenon among twenty-two good and poor readers at grades 2, 4, and 6. The RAFT score is an indication of how long each fixation is in order to estimate the number of words that a subject can link together in his/her visual image or iconic store. Subjects were tested with the *Gray Oral Reading Test* at their appropriate levels: all subjects were given the same standard passage from the *Iowa Tests of Basic Skills*. Poor readers were found to make many more pauses of longer duration during oral reading than did good readers; poor readers in the study made nearly four times as many fixations as good readers, and average fixation time was nearly twice as long. There was a coefficient of .94 between RAFT scores and the time taken to find the missing word among six alternative answers, indicating that the RAFT score is very sensitive to contextual analysis abilities and iconic storage capacity.

Horii, Yoshiyuki, & Cooke, Paul A. Some airflow, volume, and duration characteristics of oral reading. *Journal of Speech and Hearing Research,* September 1978, *21,* 470-481.

Examines distributional characteristics of inspiratory and expiratory (oral + nasal) flow rates, volumes, and durations during oral reading of eight adult subjects as they read a 19-sentence paragraph. Subjects were asked to read the 331-word passage in their normal oral reading style. Flow signals, sensed through a facemask-pneumotachometer pressure transducer system, were quantified and analyzed by a computer program. Results showed that the modification of volume and flow during oral reading was primarily related to the timing of inspiratory and expiratory phases and secondarily to the magnitude of oronasal air volume. Effects of linguistic constraints were observed in inspiratory behavior, within and between sentences. Inspirations occurred predominantly at linguistic boundaries such as phrase and sentence junctures. Large inspiratory volumes were generally associated with intersentence inspirations while smaller volumes tended to be related to intrasentence inspirations. Connected utterances showed lower and more variable peak flows than those reported for isolated syllables or words. Wide individual differences in respiratory behavior were noted.

IV-12 Rate of reading

Grosjean, Francois H., & Lass, Norman J. Some factors affecting the listener's perception of reading rate in English and French. *Language and Speech,* July/September 1977, *20,* 198-208.

Investigates the listeners' perception of reading rate in two languages using thirty-two French speaking and thirty-two English speaking college students. A French and an English passage were scaled to alter reading rates; scales obtained remained invariant across languages, texts, and methods of altering rate. They were not invariant, however, when subjects estimated naturally and mechanically altered rates one after the other. In this case, subjects changed the weights they attributed to the two component variables of speech rate—pause rate and articulation rate—in arriving at a global impression of speech rate. A comparison of the present results with those of prior investigations showed that the scales were not invariant with changes in the range of stimuli presented. An intramodal range effect was confirmed by cross-modality matching in which subjects matched apparent force of handgrip to apparent speech rate.

Nelson, Nancy Wong, & Geyer, John J. Immediate memory for sentence of fast and slower readers as a function of rate of presentation. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978. 111-115.

Investigates the short and longer memory over sixteen passages of connected discourse of sixty-four high school subjects matched for comprehension but significantly differentiated by reading rate on the *Nelson-Denny Reading Test.* A criterion sentence was embedded immediately or eighty syllables after the base sentence and consisted of the unchanged base sentence or the base sentence changed semantically, syntactically, or lexically. Passages were presented at slow rates (160 wpm) or fast rates (480 wpm). In ability to detect change in criterion sentence: no significant difference was found between fast and slower readers, slow rate presentation was significantly higher than fast rate, the slow-fast order mean score was significantly higher, and the semantic probe was significantly higher than the syntactical, lexical, and identical probes. Fast readers scored significantly higher than slow readers in identification of type of change.

Kail, Robert V., Jr., & Marshall, Christine Vereb. Reading skill and memory scanning. *Journal of Educational Psychology,* October 1978, *70,* 808-814.

Reports on four experiments comparing skilled and unskilled third and fourth grade readers (N's of 20, 20, 16, and 16) in their rate of scan memory. Subjects read one to three statements and answered a question on one of the statements. Skilled readers scanned significantly faster under both oral and silent reading conditions. Differences between the groups were less pronounced when the scan component was minimized. Subjects were slightly more accurate on "yes" answered questions than on "no" answered questions. In general responses were more accurate for one-sentence span (*M* = 97 percent) than 3-sentence span (*M* = 92 percent).

Ikeda, Mitsuo, & Saida, Shinya. Span of recognition in reading, *Vision Research,* July 1978, *18,* 83-88.

Explores the relationship between span of forced recognition of fields of Japanese letters and reading rate of Japanese science material for five Japanese college subjects. Within critical field size limits, increase of visual field increased reading rate. The critical field size varied from ten to seventeen letters among the subjects, and was considered to be much larger than the mean size of span of recognition under normal reading conditions.

Ellis, N. C., & Miles, T. R. Visual information processing as a determinant of reading speed. *Journal of Research in Reading,* September 1978, *1,* 108-120.

Investigates the relationship between tachistoscopic perceptual efficiency and reading speed for fifty non-dyslexic and four dyslexic college readers. Tachistoscopic measures consisted of 5-digit processing time, embedded letter diagram search, and visual information storing. Reading rate was assessed over moderately short selections of nonfiction and fiction where the reading purpose was 1) to determine the general gist of meaning or 2) to thoroughly comprehend.

Reading rate for different materials and directions intercorrelated from +0.77 to +0.84. Reading for general gist of light nonfiction produced the fastest short selection rate. Among the non-dyslexic subjects, the most efficient visual processors read significantly more efficiently than the less efficient visual processors, and the lowest 40 percent of non-dyslexics were significantly superior to the dyslexics in both visual processing and reading rate.

IV-13 Other factors related to reading

CICIRELLI, VICTOR G. The relationship of sibling structure to intellectual abilities and achievement. *Review of Educational Research,* Summer 1978, *48,* 365-379.

Reviews the literature on the influence of siblings on child development, citing some findings on the relationship of sibling structure to reading achievement.

BUSSE, THOMAS V., & SERAYDARIAN, LOUISA. The relationships between first name desirability and school readiness, IQ, and school achievement. *Psychology in the Schools,* April 1978, *15,* 297-302.

Explores the relationships among first name desirability, school readiness, IQ, and school achievement with 1727 elementary school children. Subjects in the study rated the first names of one another as "like," "neutral," or "don't like." School readiness was measured by the *Metropolitan Readiness Test,* achievement was assessed with the *Stanford Achievement Test* and the *Iowa Test of Basic Skills.* School Readiness, IQ, and achievement variables showed small, but significant, correlations with first name desirability for girls; boys also showed a first name effect, but the magnitude was smaller. Most correlations remained significant even when the effects of parental education and ethnicity were partialed out.

WILLIAMSON, ANN P. Emotional adjustment as a factor in reading. *The Clearing House,* February 1979, *52,* 250-254.

Provides some teaching strategies designed to address emotional maladjustment factors in reading. Discusses some relevant research.

BROWNE, THOMAS; STATSKY, BERNARD A.; & EICHORN, JOHN. A selective comparison of psychological, developmental, social, and academic factors in three treatment settings. *Child Psychiatry and Human Development,* Summer 1977, *7,* 231-253.

Examines 510 emotionally disturbed children in three treatment settings for differences in a variety of personological variables including reading and school achievement. Subjects were enrolled in private day schools, private residential schools, and public school special classes for the emotionally disturbed. Reading, spelling, and arithmetic scores from the *Wide Range Achievement Test* were obtained on all students. In addition, WISC or *Stanford-Binet* scores, and data on family income, social position, physical health, and behavioral descriptions were obtained. Children from the residential treatment centers obtained the highest reading and spelling scores on the WRAT.

RUHLAND, DAVID; GOLD, MARTIN, & FELD, SHEILA. Role problems and the relationship of achievement motivation to scholastic performance. *Journal of Educational Psychology,* December 1978, *70,* 950-959.

Examines the relationship among achievement motivation, student role conflict, and perceived popularity with 154 first and fourth graders. Students in the study were administered either the *Metropolitan Achievement Test* or the *Iowa Test of Basic Skills.* Subjects were also given a projective measure of achievement motivation and a measure of student-role conflict that asked them to guess how they thought their teachers and friends would feel if a child behaved as described in the items in the instrument. A positive relationship between a socially based measure of achievement motivation and scholastic performance was found for upper graders who experience low role conflict and also for upper graders who were high in sociometric status. It was also discovered that among upper grade subjects, autonomously based achievement motivation relates most strongly to the performance of children low in sociometric status.

JORGENSON, GERALD W.; KLEIN, NANCY; & KUMAR, V. K. Achievement and behavior correlates of matched levels of student ability and material difficulty. *Journal of Educational Research,* November/December 1977, *71,* 100-103.

Examines the accuracy of the match between ability level and material difficulty in a sample of forty-one third through sixth grade boys, and the relationship of the match to reading achievement and classroom ajustment. Subjects were administered the reading comprehension and recognition subtests of the *Peabody Individual Achievement Test* and the *Vinter Pupil Behavior Inventory.* The level of difficulty of the material being used with each student was determined also. Though not related to achievement, the accuracy of the match was related to classroom behavior: less accurately matched materials (easier materials) were related to improved classroom behavior.

WELLS, REESE. Parents and reading: what fifth graders report. *Journal of Research and Development in Education,* Spring 1978, *11,* 20-26.

Isolates factors among 300 fifth graders that give rise to negative and positive attitudes toward reading. A total of fifty-nine experience items were culled from prior research and pilot work. These items were administered to subjects in 4 schools randomly selected from one school district. Also administered was the *Iowa Test of Basic Skills.* Factor analyses indicated six major factors that accounted for 38 percent of the variance in reading test scores. Of these, three were parent negative, two parent positive, and one teacher negative. More specifically, the parent negative factors were characterized by overstress on reading, punishment, and parent-induced frustration. The parent positives were characterized by supportiveness (providing interesting reading material), and arousal of interest. The teacher negative factor was related to authoritarian behaviors such as choosing stories that children didn't like, spending too much time talking about the book, giving too much reading for homework, and not explaining directions thoroughly.

Frith, Uta. From print to meaning and from print to sound, or how to read without knowing how to spell. *Visible Language*, Winter 1978, *12*, 43-54.

Compares two groups of 12-year-olds, matched for IQ and reading ability, with respect to spelling ability; the total sample consisted of twenty students. One group consisted of good spellers, the other of poor spellers. In general reading ability, the two groups were similar. However, they differed on other reading tasks such as nonsense word identification and tasks involving conversion of print into sound. The differences indicated that the poor spellers were proficient at going from print directly to meaning, but were impaired at converting print to sound. Good spellers, on the other hand, demonstrated mastery of both aspects of reading behavior.

Kamil, Michael L., & Hanson, Raymond H. Perceptual versus semantic information processing in semantic category decisions. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference*, 1978. 84-87.

Examines the quality and latency of categorical decision making ability among sixteen junior high school students and sixteen college students. The decision task was to make same category or different category judgments for pairs of exemplars from pre-selected categories. On half of the trials, advanced information was provided in the form of the name of a category relevant to the word pair presented; on the remainder of the trials, no priming information (blank) was presented. Three types of word pairs were included: physically identical pairs, categorically identical pairs, and different category pairs. Half of the subjects were from regular English classes and half were from remedial reading classes; subjects were judged college, good junior high, or poor junior high readers. College level subjects showed a level of goodness effect in all conditions, while good junior high readers showed this effect in all conditions except in the physically identical trials with visual priming. Poor readers showed no level of goodness effect in any condition. For the categorically identical trials, college level subjects showed priming advantages whereas good readers showed priming advantage only when the priming information was auditory. Poor readers showed no advantage for priming information. Additional results are reported.

Vukelich, Carol, & McAdam, Judith A. Mothers' ability to predict their children's reading readiness skills. *The Reading Teacher*, December 1978, *32*, 345-348.

Investigates the ability of mothers to predict their children's reading readiness performances. Children in the study were thirty-six 4- and 5-year-olds;

their mothers ranged in age from 26 to 38 years. Both children and mothers were administered the *Metropolitan Readiness Test* (MRT); mothers were asked to mark the items in the way they thought their children would. A chi-square analysis showed that, as a group, the mothers were able to predict accurately their children's scores on all *MRT* subtests beyond chance levels. The only factor that entered into the results was the finding that the older the child, the better the mother was able to predict his/her reading readiness skills (r = 0.399).

Tovey, Duane R. A psycholinguistic analysis of reading activities. *Reading World*, December 1977, *17*, 125-134.

Examines the extent to which actual classroom behaviors are matched to three psycholinguistic concepts: 1) reading as a process of communicating with an author visually, 2) reading as a predictive process whereby the reader applies his/her oral language abilities through the use of syntactic and semantic cues, and 3) reading as a process of using as few visual cues as possible in order to derive meaning from printed symbols. Thirty teachers, five from each grade level 1 through 6, were observed; reading activities were noted, including activities from the chalkboard, workbooks, texts, worksheets, and activities used during oral instruction. These activities were then categorized and analyzed according to psycholinguistic concepts. Totally, 16 percent of the 431 activities that were analyzed matched the premises of the psycholinguistic concept of reading. Sixty-five percent of the activities reflected stress on the sound/symbol correspondence of printed language. The remainder of the activities that were analyzed included isolated vocabulary instruction as well as additional skill instruction that did not reflect the psycholinguistic concept of reading.

Sloboda, John A. Phrase units as determinants of visual processing in music reading. *British Journal of Psychology*, November 1977, *68*, 117-124.

Reports a study of six accomplished musicians who were asked to read passages of music wherein the amount of information about the presence of phrase units was systematically varied. A distinction was made between physical unit markers, which allowed identification of a unit prior to analysis of its component elements, and structural unit markers which defined a unit with regard to the sequential rules obeyed by its constituent elements. During the passage reading, text would be removed at a point known in advance only to the experimenter. Subjects were then required to execute all the material seen beyond this point to provide a measure of the eye-hand span. Results indicated that the presence of structural markers increased span, and tended to cause span to extend exactly to a phrase boundary. The presence of physical markers did not increase span. The results are discussed relative to the analogy between the cognition of music and language, in that knowledge of abstract structure is of importance in the organization of immediate visual processing of text.

Lazdowski, Walter P. Predicting reading ability through language experience: the Lazdowski sample survey (LSS). In Gwyn Enright (Ed.) Personalizing learning systems: ecologies and strategies. *Proceedings of* *the Tenth Annual Conference of the Western College Reading Association*, 1977, *10*, 165-169.

Examines the feasibility of determining the reading ability of an individual through an analysis of writing samples. A total of 338 writing samples were collected from junior high, senior high, and college students (grades 7-13). Their reading abilities (test not identified) ranged from grade 3 level to beyond grade 14. Writing samples were categorized according to reading levels without regard to age or academic grade level. Eight readability formulas were applied to all writing samples. In addition, a random selection of 120 writing samples were subjected to analysis using the following criteria: 1) vocabulary load, including difficulty and diversity; 2) sentence structure (percentage of simple sentences, average length); 3) density of ideas; 4) syntactical complexity; and 5) ratio of T-Units to total number of words and syllables. Using a step-wise multiple regression technique, the author developed a formula which included the most likely predictors of reading ability. It was found that the formula predicted reading ability grade levels of subjects within one grade level in 65 percent of the cases checked (N = 150) and within two grade levels in 99 percent of the cases.

Weinstein, Carol S., & Weinstein, Neil D. Noise and reading performance in an open space school. *The Journal of Educational Research*, March/April 1979, *72*, 210-213.

Examines the interaction between classroom noise levels and reading comprehension performance among sixty fourth graders. Measurements were taken at various times in the classroom to ascertain noisy and quiet times during the day. Subjects were then given questions assessing main idea and context clue usage from skill booklets and tested on these skills during quiet and noisy times. The study was carried out over a 3-week period with each of the three classes involved participating twice a week, once in noise and once in quiet. The children were designated as low-ability, average-ability, or high-ability by their teachers. Noise sessions averaged 13 dbA higher than quiet sessions. Analysis of results indicated no significant effect of noise level on reading accuracy or speed.

Anderson, Eleanor, & Thomas, K.C. The effect of colour of tester on performance on a group reading test. *Journal of Research in Reading*, February 1979, *2*, 44-52.

Considers the effect of skin color of the tester on reading test performance of 8-year-old children. The population included twenty-four West Indian children and twenty-four Caucasian children, matched for school, sex, and age, and from three British junior schools. Two forms of the *Young Group Reading Test* were administered by two student teachers, one of West Indian origin and one from an indigenous family. There were no statistically significant differences between mean scores administered by the two testers.

Fitzgerald, Thomas P., & Fitzgerald, Ellen F. A cross cultural study of three measures of comprehension at the primary and intermediate levels. *Educational Research Quarterly*, Summer 1978, *3*, 84-92.

Examines the effect of various test formats on the reading comprehension of 207 grade 2, 3, and 4 students from the United States and Ireland. Experimental passages were printed in each of three testing formats: multiple-choice cloze, maze, and standard cloze. Subjects were comparable in reading ability; further, teachers rated subjects on factors of personality, comprehension, word recognition, and oral language development. The highest average scores resulted from the use of the multiple-choice cloze and the lowest from the standard cloze. U.S. students appeared to have higher performance on the recognition formats (multiple-choice cloze and maze), while the Irish subjects excelled with the completion cloze format.

Fogelman, K. School attendance, attainment and behaviour. *British Journal of Educational Psychology*, June 1978, *48*, 148-158.

Draws upon data from the National Child Development Study to relate school attendance at the ages of 7 and 15 with age 16 reading and math test scores, school behavior as assessed by the Rutter scale, social class, and sex. Early attendance predicted later attendance and later attendance is significantly related to reading and math achievement. Statistically, this main effect tends to account for such other significant interactions of later attendance with sex, school behavior, and social class. Children of this population with higher attendance levels obtain higher average scores on reading comprehension and mathematics, are less often cited by teachers for deviant behavior, but no evidence indicated that this relationship differs with social class.

Anderson, C.C., & Maguire, T.O. The effect of TV viewing on the educational performance of elementary school children. *The Alberta Journal of Educational Research*, September 1978, *24*, 156-163.

Tests the hypothesis that extent of TV viewing has a negative influence on educational performance. One hundred and two grade 3 and 4 and 198 grade 5 and 6 Canadian pupils were assessed on 14 variables: sex, SES, Lorge-Thorndike verbal and nonverbal IQ., a local math test, word meaning and paragraph comprehension from the Stanford Reading Test, two measures of impulsivity, and five measures of TV viewing. Analysis of variance revealed no significant TV group effects on the three attainment variables. A significant positive relationship was observed between amount of TV viewing and behavioral impulsivity, however.

Meeks, Jane W., & Morgan, Raymond F. Classroom and the cloze procedure: interaction in imagery. *Reading Horizons*, Summer 1978, *18*, 261-264.

Presents descriptive findings of reactions of two eighth grade English classes to reading Capote's *A Christmas Memory*. All pupils received pre-reading preparation on the writer's use of sense appealing imagery. The experimental group utilized an Interactive Cloze Procedure which employed small and large group verbalized interaction concerning every fifth deleted image related adjectives. Ninety percent of the experimental (cloze interactive procedure) group rated a "liking" for the story compared to 73 percent of the control (normal reading) group.

LUCE, SALLY R., & HOGE, ROBERT D. Relations among teacher rankings, pupil-teacher interactions, and academic achievement: a test of the teacher expectancy hypothesis. *American Educational Research Journal*, Fall 1978, *15*, 489-500.

Evaluates the Garner and Bing model of teacher expectancy influence by relating teacher rankings, pupil attentiveness, teacher-pupil interactions, IQ and academic test scores for a sample of forty-two males and sixty-two females in third and fourth grades of the Ottawa, Canada, school system. All subjects were considered fluen[illegible]lish. Several factors are generalized from the many findings: 1) teacher e[illegible]tions were not a major determinant of pupil achievement, 2) teacher perceptions of pupil ability and achievement were not translated into differential teacher behavior; 3) pupil attentiveness bears a significant relationship to achievement scores; 4) lower achievers initiated more teacher interactions and higher frequency of critical teacher reaction, and 5) the influence of IQ tended to suppress significance between assessed behaviors and achievement scores.

IV-14 Factors related to reading disability

VERNON, M.D. Variability in reading retardation. *British Journal of Psychology*, February 1979, *70*, 7-16.

Suggests that there may be at least five types of retarded readers and that each type of disability may be associated with a particular kind of deficiency in conceptual thinking. Relevant research is cited.

YULE, WILLIAM, & RUTTER, MICHAEL. Epidemiology and social implications of specific reading retardation. In Robert M. Knights & Dirk J. Bakker (Eds.) *The neuropsychology of learning disorders: theoretical approaches*. Baltimore, Maryland: University Park Press, 1976. 25-39, & 469-521.

Addresses the problem of finding a satisfactory definition of reading difficulty. A definition is advanced and applied in a series of large-scale epidemiological studies. The substantive findings from these studies are briefly described.

GREDLER, GILBERT R. Learning disabilities and reading disorders: a current assessment. *Psychology in the Schools*, April 1978, *15*, 226-238.

Examines studies of the diagnosis and remediation of learning disabilities and reading disorders. Such factors as visual perception, learning style and strategies, modality deficits, and the efficacy of various treatment approaches are reviewed.

ROURKE, BYRON P. Reading retardation in children: developmental lag or deficit? In Robert M. Knights & Dirk J. Bakker (Eds.) *The neuropsychology of learning disorders: theoretical approaches.* Baltimore, Maryland: University Park Press, 1976. 125-137 & 469-521.

Considers the relative merits of the "developmental lag" position and the "deficit" position vis-a-vis the explanation of reading retardation in children. Two studies are compared in an attempt to deal with this issue.

EGELAND, BYRON, & SCHRIMPF, VICKI. Approaches to understanding and treatment of learning-disabled children. In Arnold P. Goldstein (Ed.) *Prescriptions for child mental health and education.* New York: Pergamon Press, 1978. 175-255.

Includes summaries of research on assessment of perceptual-motor development, visual perception, auditory perception, psycholinguistic abilities, perceptual motor training, visual perceptual training, auditory-perceptual training in a chapter reviewing various approaches to learning-disabled children.

ZINKUS, PETER W., & GOTTLIEB, MARVIN I. Patterns of perceptual deficits in academically deficient juvenile delinquents. *Psychology in the Schools,* January 1979, *16,* 19-27.

Investigates perceptual deficiencies in academically deficient males, ages 13 to 18, in a correctional facility for delinquents. Subjects were administered the WISC or WAIS, *Wide Range Achievement Test* and the *Bender-Gestalt.* Of the sixty subjects screened, twenty-two were identified as severely deficient (at least 3.5 grade levels underachievement) and sixteen subjects were classified as adequate in achievement (less than 1.0 grade level underachievement). The two groups did not differ significantly in verbal, performance, or full scale intelligence, but the severely deficient did significantly poorer on subtests of arithmetic, vocabulary, and Digit Span. Multiple perceptual deficits and auditory perceptual deficits were related significantly to academic deficiency in this population.

GILLIS, JOHN STUART, & SIDLAUSKAS, AGATHA E. The influence of differential auditory feedback upon the reading of dyslexic children. *Neuropsychologia,* 1978, *16,* 483-489.

Examines the relationship between reading and ear laterality among ten retarded readers, with a mean age of 8.1 years. Subjects averaged more than one year behind in reading achievement on the *Gates-MacGinitie Reading Test;* subjects were scored average on the *WISC*-R. The children were then studied under different conditions of auditory feedback of oral reading wherein disproportionate percentages of feedback were directed to the left and/or right ear. It was found that oral reading was more rapid when feedback was directed mainly to the right ear instead of at equal intensity to both ears. The effect of amplifying high frequencies and attenuating low frequencies was also studied, but the results were not clear.

Sobotka, Karen R.; Black, F. William; Hill, Suzanne D.; & Porter, Robert J. Some psychological correlates of developmental dyslexia. *Journal of Learning Disabilities,* June/July 1977, *10,* 363-369.

Compares psychological test performance of twenty-four dyslexic boys and twenty-four normal readers at ages 7, 9, 11, and 13 years. All subjects exhibiting social or educational deprivation, gross sensory-motor handicaps, specific neurologic deficiencies, intellectual impairment, or primary emotional disorders were screened out of the study. Experimentals and controls were administered a battery of psychological tests of perceptual and perceptual-motor abilities (*WISC* Performance Scale, *Bender-Gestalt,* and an auditory-visual integration test) and a battery of psychological tests of verbal-cognitive skills (*WISC* Verbal Scale, two dichotic listening tasks, and a test of word fluency). Significant differences between dyslexics and controls were discovered for the overall batteries of perceptual/perceptual-motor skills and verbal-cognitive skills; however, no single measure discriminated the two groups. The absence of a single etiology in reading retardation, either deficit or developmental delay, was discussed, as well as educational implications for programs of reading remediation.

Weaver, Phyllis A. Comprehension, recall, and dyslexia: a proposal for the application of schema theory. *Bulletin of the Orton Society,* 1978, *28,* 92-113.

Explores issues related to certain possible problems of comprehension and recall among dyslexics, and proposes a new direction for research through the application of schema theory. Reviews related research.

Shankweiler, Donald, & Liberman, Isabelle Y. Reading behavior in dyslexia: is there a distinctive pattern? *Bulletin of the Orton Society,* 1978, *28,* 114-123.

Reports results of several studies in which the authors were involved. The studies were aimed at differentiating dyslexics from other poor readers.

Valtin, Renate. Dyslexia: deficit in reading or deficit in research? (Critical comments on the methodological and theoretical aspects of research on Legasthenie). *Reading Research Quarterly,* 1978-79, *14*(2), 201-221.

Discusses frequently overlooked faults in the research methodology used to investigate dyslexia after presenting a short summary of the author's research.

Harris, Albert J. A reaction to Valtin's 'Dyslexia: deficit in reading or deficit in research?' *Reading Research Quarterly,* 1978-1979, *14*(2), 222-225.

Considers the main points of a paper on dyslexia.

PATTON, JAMES E., & OFFENBACH, STUART I. Effects of visual and auditory distractors on learning disabled and normal children's recognition memory performance. *Journal of Educational Psychology,* October 1978, *70,* 788-795.

Investigates whether distractibility among twenty-six grade 2, 3, and 4 children who were classified as having visual or auditory reading disorders could be predicted by studying reading disorders. They and seventeen normally achieving children performed visual and auditory recognition memory tasks, with visual or auditory distractors presented on 80 percent of the trials. Analysis of error frequencies revealed that with distractors, subjects in the two learning disabled groups made more errors and did not improve over trials as much as the normal control children. However, the predicted interaction between learning disability modality and task or distractor modality did not occur. Instead, all three groups made more errors when task and distractor were in the same modality.

BANNATYNE, ALEXANDER. The spatially competent LD child. *Academic Therapy,* November 1978, *14,* 133-55.

Focuses on research that discriminates between two groupings of learning disability characteristics: spatial competency with poor auditory vocal memory functioning and minimal neurological dysfunctions.

TORGESEN, JOSEPH K. Performance of reading disabled children on serial memory tasks: a selective review of recent research. *Reading Research Quarterly,* 1978-79, *14*(1), 57-87.

Provides a review of research which has used serial memory tasks to investigate performance differences between skilled and less skilled readers of the same general intelligence.

DOWNING, JOHN. Results of teaching reading in i.t.a. to children with cognitive deficits. *Reading World,* March 1979, *18,* 290-299.

Reviews studies of i.t.a.'s effects in teaching children with cognitive deficits.

TARNAPOL, MURIEL. Reading problems worldwide. *Bulletin of the Orton Society,* 1977, *27,* 102-111.

Reviews some reports and studies on reading and learning problems in several different countries.

COLES, GERALD S. The learning-disabilities test battery: empirical and social issues. *Harvard Educational Review,* August 1978, *48,* 313-340.

Reviews validation studies on the ten most frequently recommended procedures used for diagnosing learning disabilities. Concludes that specialists in the field have resorted to biological explanations for institutional failures.

PURVES, ALAN C. Using the IEA data bank for research in reading and response to literature. *Research in the Teaching of English,* December 1978, *12,* 289-296.

Suggests some of the possible uses for secondary analyses of data bank from the International Association for the Evaluation of Educational Achievement (IEA). The various types of information available in the data banks are listed and examples from reading and literature are presented. In reading, scores for U.S. 14-year-olds who scored one standard deviation in either direction of the mean were isolated and looked at for identifiable characteristics. While 55.3 percent of all good readers were girls, it was found that 49.2 percent of poor readers were also girls. Over half of the good readers had two or fewer siblings, whereas almost half of the poor readers came from families having four or more siblings. In the poor readers' group, 48.8 percent of fathers and 44.6 percent of mothers had less than ten years of school; for good readers, those percentages were 13.3 and 10.4 for fathers and mothers, respectively. About half of the poor readers spent less than an hour a week reading as opposed to only 11.7 percent of good readers. Relative to television viewing, good readers were found to watch more, although there were no great differences. Socioeconomic differences in background supported existent findings with more good readers coming from managerial or professional families. Another aspect of IEA data viewed was in the area of response to literature.

RENNICK, PHILLIP M.; KLINGE, VALERIE; HART, ZWI; & LENNOX, KATHLEEN. Evaluation of intellectual, linguistic, and achievement variables in normal, emotionally disturbed, and learning disabled children. *Adolescence,* Winter 1978, *13,* 755-766.

Concerns the development of an abbreviated test battery to assess children presenting learning difficulty in the classroom setting. Factor analyses of the WISC, *Illinois Test of Psycholinguistic Abilities,* and the *Peabody Individual Achievement Test* (PIAT) were made of performance of children ages 5 to 11 with minimal IQ of 80. A total of 108 were identified as learning disabled, fourteen as emotionally disturbed, and thirty-seven served as normal controls. Twelve subtests accounted for 85 percent of the total variance. The reading and spelling subtests of the PIAT contributed heavily to the factor loadings, and discriminated significantly between the normals and the learning disabled and emotionally disturbed.

JOHNSON, DAVID A., & WOLLERSHEIM, JANET P. WISC patterns and other characteristics of reading disabled children. *Perceptual and Motor Skills,* December 1977, *45,* 729-730.

Reviews twenty-one studies involving the performance of reading-disabled children on the *Wechsler Intelligence Scale for Children.* Of these, low scores were reported on Information (fourteen studies), Arithmetic (eighteen studies), Digit Span (eleven studies), and Coding (sixteen studies). Ten studies reported comparatively high scores on Picture Completion for disabled readers.

Methodological differences occurred between the studies. Factorial analysis comparisons suggest disabled readers tend to be deficient in verbal areas requiring retention of formal knowledge and immediate retention of auditory stimuli. Strength was observed in verbal comprehension of a practical nature.

ANDREW, JUNE M. Why can't delinquents read? *Perceptual and Motor Skills, October 1978, 47,* 640.

Examines the hypothesis that the reading problems of adolescent delinquents will reflect specific retardation due to poor verbal skills rather than a product of low intellect. The files of 110 delinquents (forty-one Anglo boys, twenty-six non-Anglo boys, twenty-three Anglo girls, and twenty non-Anglo girls) were compared for WISC or WAIS and WRAT reading scores. Reading correlated significantly higher with verbal than with full scale scores. Coefficients of correlation between reading and verbal IQ were significantly higher for non-Anglos. Lower verbal skills were identified as a contributing factor in the specific reading retardation of delinquents.

PERFETTI, CHARLES A.; FINGER, ELYSE; & HOGABOAM, THOMAS. Sources of vocalization latency differences between skilled and less skilled young readers. *Journal of Educational Psychology,* October 1978, *70,* 730-739.

Reports three experiments with thirty-two third graders that investigated the function of set size, number of syllables, and stimulus material with vocalization latencies. Subjects were identified as skilled or unskilled readers on the basis of the *Metropolitan Achievement Test*. Subjects were presented stimuli differing in set, size, color, and type, then asked to name the stimulus as quickly as they could; latencies were recorded. No differences were discovered between good and poor readers for naming colors, digits, or pictures. Differences were found for words, and differences increased with number of syllables (and letters). Less able readers were also affected negatively by set size increases with words. Inefficiency in alphabetic verbal coding rather than use of information constraint or word retrieval appeared to be the major source of reader differences in vocalization latencies.

COHEN, RONALD L., & NETLEY, CHARLES. Cognitive deficits, learning disabilities, and WISC verbal-performance consistency. *Developmental Psychology,* November 1978, *14,* 624-634.

Compares children with specific learning disabilities to controls on several tests of information processing and memory. Experimental measures included: 1) orally presented vocabulary items where subjects identified the item not belonging to the implied category, 2) a measure of subjects' ability to process speech in the form of sentences as rate increased, 3) a task in which subjects made same/different judgments about trigrams, 4) auditory discrimination, 5) a test of short-term memory involving the serial recall of digits, 6) a paired associates task involving short-term memory, and 7) a discrimination task involving geometric designs. The main results were: LD children with a balanced Verbal-Performance IQ showed some deficit in the semantic processing of auditory verbal material, while this same deficit was not demonstrated by LD's having a high Performance IQ (relative to Verbal IQ); increasing rate of presentation in information processing tasks did not affect the LD's more than controls; LD's showed little deficit in auditory digit span, but did show large deficits in short-term memory tasks involving supraspan auditory messages.

Rugel, Robert P. The value of parental report of family histories of reading disorders and pregnancy and birth complications in reading disabled and normal children. *Psychology in the Schools,* October 1978, *15,* 583-587.

Assesses the value of parental report of family history of reading disorders and of pregnancy and birth complication information with two samples of reading disabled children and a control group. The first reading disability sample consisted of seventy children seen at a private learning disability center in a large metropolitan area. The second sample was of eighty-two children labeled as learning disabled by specialists in the two school systems in which they were enrolled. The control group consisted of thirty-five children matched with subjects in the second sample on age, sex, and socioeconomic status. The incidence of pregnancy and birth complications in each of the reading disability samples was over 40 percent while it was 31 percent in the control population. The difference was not statistically significant. The incidence of family histories of reading disorders averaged 49.6 for the two disability groups and 19 percent for the control group. The reading disability group showed greater evidence of perceptual motor coordination difficulties and of impulse control difficulties than did control subjects.

Lefton, Lester A.; Lahey, Benjamin B.; & Stagg, David I. Eye movements in reading disabled and normal children: a study of systems and strategies. *Journal of Learning Disabilities,* November 1978, *11,* 549-558.

Compares the nature of eye movement among a total of ninety-six adults, reading-disabled fifth graders, and normal reading fifth and third graders. Subjects performed a match-to-sample task, choosing from one of four 5-letter alternatives that matched a sample. Subjects were exhorted to be accurate in the experimental task which was used to study pattern and strategy differences in eye movements that develop with reading in normal and reading disabled subjects after the duration and frequency of eye movements were assessed. Results indicated the existence of developmental differences, particularly with respect to the sequence of fixations and sustained attention. The nature of eye movements in the reading disabled child is unsystematic compared to normals after sustained search times of approximately 5 seconds.

Curtis, Dwight W., & Elkins, Wallace. Matching of normally oriented and mirrored words by good and poor readers. *Perceptual and Motor Skills,* December 1977, *45,* 1163-1168.

Investigates the ability of ten good and ten poor sixth grade readers to judge tachistoscopically presented word pairs to be same or different. Poor readers were identified as retarded in reading by at least one grade. Eighty pairs of 5- and 6-letter words comprised the pairs. There were forty same pairs and forty different pairs which were normally oriented, both mirrored, or one was oriented and the second was mirrored. Good readers made fewer errors than poor readers on normally oriented same pairs but showed no advantage on other configurations. Poor readers were more accurate in detecting mismatches than good readers.

FREEMAN, BARRY A., & BEASLEY, DANIEL. Discrimination of time-altered sentential approximations and monosyllables by children with reading problems. *Journal of Speech and Hearing Research,* September 1978, *21,* 497-506.

Examines the ability of twenty normal and twenty reading disabled subjects averaging 9.4 years of age to discriminate time-compressed 3- and 5-word sentential approximations. Subjects were also administered the *Word Intelligibility by Picture Identification* (WIPI) test with or without accompanying pictures. Approximations were presented auditorily, requiring subjects to repeat stimuli. Reading impaired children showed a significant decrease in mean performance as word length increased; increasing time compression and decreasing sentential order also resulted in lower scores for poor reading subjects. On the *WIPI,* reading impaired subjects' scores showed a significant difference between test formats, suggesting that these children had difficulty activating auditory short-term memory for automatic recall and repetition without accompanying visual short-term memory stimulation.

HYND, GEORGE W.; OBRZUT, JOHN E.; HYND, CYNTHIA R.; & CONNOR, ROBERT. Attentional deficits and word attributes preferred by learning disabled children in grades 2, 4, and 6. *Perceptual and Motor Skills,* October 1978, *47,* 643-652.

Investigates the suspected effects of attentional deficits on the relative preferences for associative, acoustic, and orthographic attributes in word recognition by fifteen learning disabled children in each of grades 2, 4, and 6. The word recognition task was divided into two parts. For the first part, forty stimulus words were visually presented and read to subjects who were asked to repeat the word. The second half called for the presentation of each of the forty words with four distractors. Subjects were to indicate which word they recalled from the first task. An analysis of errors in recall suggests that the children in the second grade did not encode and retrieve information as did their normal counterparts, but rather used several stimulus attributes in retrieval. The children in the sixth grade evidenced a significant preference for the orthographic attribute in recall as did normal second grade children.

LLOYD, DEE NORMAN. Prediction of school failure from third-grade data. *Educational and Psychological Measurement,* Winter 1978, *38,* 1193-1200.

Analyzes background characteristics, school performance, and achievement test data of 788 boys and 774 girls who were followed to their transfer, withdrawal, or graduation from high school. A total of nineteen measures were derived from data in school records. Included in the reading measure were marks in grade 3 reading and third grade Total Reading scores on the *California Achievement Test*. As early as the third grade, dropouts differed significantly from graduates in age, IQ level, marks received in course work, parent's occupational and educational level, family size, marital status of parents, and tested reading, arithmetic, and language skill achievement. A combination of predictors produced a multiple correlation with dropout or graduation of .51 for boys and .49 for girls. A discriminant function analysis yielded an overall correct classification of dropouts and graduates of 75 percent. Although prediction was less accurate for dropouts than for graduates, six to seven of every ten later school failures were correctly classified by characteristics exhibited in the third grade.

DUFFELMEYER, FREDERICK A. The vowel cluster pronunciation preferences of proficient and non-proficient adult readers. *Visible Language*, Spring 1978, *12*, 195-200.

Examines differences on scores on a pronunciation test for twenty-seven good and twenty-seven poor college readers. Subjects were assigned reading proficiency status on the basis of scores from the *Nelson-Denny Reading Test*. The pronunciation test administered was identical to one employed in a previous study and contained twenty-four items covering four vowel clusters. Overall, it was discovered that the proficient readers scored significantly higher on the pronunciation test than the non-proficient group. Results suggested that the vowel cluster pronunciation preferences of proficient adult readers are more affected by graphemic environment features than by frequency of occurrence features; however, these two factors were of equivalent influence for non-proficient readers.

ALLINGTON, RICHARD L., & STRANGE, MICHAEL. Word prediction of good and poor readers. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference*, 1978. 56-60.

Compares fifteen good readers from the second grade, fifteen good readers from the fourth grade, and fifteen poor readers from the fourth grade in their performance on a task requiring the integration of semantic-syntactic and grapho-phonic information. Subjects were screened for reading ability with the *Peabody Individual Achievement Test*. Subjects were exposed to sentences with one word deleted; sentences were rich, moderate or poor in context. Two words, one of low and one of high frequency, were designated as target items for each sentence. Subjects were asked to think of a word for each sentence; in the event of an incorrect response, subjects were shown single letters of the word until they responded correctly. Results indicated that older good and poor readers differed in their ability with the task; however, there were few differences in the performances of the older poor readers and the younger good readers. More skilled readers seemed to be able to use graphic information in conjunction with contextual constraints more efficiently and effectively than the less skilled readers.

SWANSON, LEE. Free recall of phonemically varied lists by normal and reading disabled children. *Psychological Reports,* December 1977, *41,* 1130.

Examines the presence of significant difficulties in recall among ten controls and ten reading-retarded children (mean age 7.4 years) using a free recall task on four phonemic word lists. The experimental tests measured children's ability to respond to phonemes discretely, retain them in accurate sequences and organize them for recall. Reading disabled subjects exhibited no hearing acuity or discrimination *(Wepman Auditory Discrimination Test)* problems and were included for study based on reading subtest scores from the *Peabody Individual Achievement Test* below the 40th percentile. A consistent difference between normal and reading disabled children was found on all phonemic lists, while conceptually and linguistically similar words were recalled better than phonetic and control words by both groups.

TORGESEN, JOSEPH K. Memorization processes in reading-disabled children. *Journal of Educational Psychology,* October 1977, *69,* 571-578.

Assesses memory process in twenty normal and twenty reading-disabled fourth grade children. Subjects in both groups were judged normal in intelligence with selected subtests from the *WISC*; the *Wide Range Achievement Test* was administered in order to identify reading achievement levels. Subjects were given sets of pictures to memorize and recall. At first, subjects were instructed to memorize stimulus materials, then observed. During memorization, if subjects were not observed to use efficient memory processes, they were instructed to group pictures that were alike together. Children in the two groups differed significantly in their recall scores on both tasks and also engaged in different kinds of study behavior. The good readers consistently approached both tasks in a more active and organized manner. When all children were instructed in the use of efficient strategies, the poor readers performed as well as the good readers.

DEFRIES, J. C.; SINGER, S. M.; FOCH, T. T.; & LEWITTER, F. I. Familial nature of reading disability. *British Journal of Psychiatry.* April 1978, *132,* 361-367.

Investigates the familial nature of reading disability with a sample of 125 reading disabled children and their families matched to a control sample (total *n* = 1044). Reading disabled children ranged in age from 7 to 12 years; possessed a near normal IQ; had a reading performance of one-half of grade level expectancy; lived with both parents; and exhibited no visual, emotional, neurological, or auditory problems. Experimental and control families were administered a 3-hour battery of tests described in previous research; also, parents responded to a self-report questionnaire. In addition to expected differences in spelling and reading, experimental subjects obtained significantly lower scores than controls on tests of other cognitive abilities. Manifold deficits were also revealed in siblings and parents of reading disabled subjects, indicating a genetic and/or common-family environmental link to reading disability.

Johnson, David A., & Wollersheim, Janet P. A comparison of the test performance of average and below average readers on the McCarthy scales of children's abilities. *Journal of Reading Behavior,* Winter 1976, *8,* 397-403.

Examines the utility of the *McCarthy Scales of Children's Abilities* (MSCA) for differentiating between twenty-four normal and twenty-four reading-disabled second grade boys. Subjects were grouped into normal/disabled categories regarding reading ability according to scores on the *Metropolitan Achievement Test;* additional data regarding SES and IQ were collected. Subjects in the two groups were subsequently matched with reference to IQ and SES, differing only in reading ability. The *MSCA* was then administered to all subjects, testing Verbal, Perceptual-Performance, Quantitative, Memory, and Motor abilities. Additionally, the *MSCA* yielded a General Cognitive Index score. Analyses revealed non-significant differences between groups on all scales.

Leong, C. K. Spatial-temporal information-processing in children with specific reading disability (abstracted report). *Reading Research Quarterly,* 1976-1977, *12*(2), 204-215.

Investigates patterns of psychological and perceptual test performance among fifty-eight reading retarded and fifty-eight above average readers averaging 9 years of age. In Experiment 1, stimulus material consisted of a dichotic list of three sets of digits with five series in each set ranging from a 2-digit pair to a 4-digit pair series. Subjects were asked to report all digits heard. In dichotic Experiments 2 and 3, a combination of digits and least confusable letters of the alphabet was used to tap the differential strategies of reporting dichotic lists by sides (left or right ear) or by types (digits or letters). The dichotic experiments involving perceptual-cognitive tasks in the present study confirmed the general findings of the position inherent in the maturational lag hypothesis. Results also reaffirm the existence of the two modes of integrative activities found in other research: simultaneous-successive synthesis.

Epstein, Michael H.; Cullinan, Douglas; & Sternberg, Les. Impulsive cognitive tempo in severe and mild learning disabled children. *Psychology in the Schools,* July 1977, *14,* 290-294.

Compares the performance of a total of nine severe and nine mild learning disabled children to nine normals on a problem-solving task; subjects averaged 10 years of age. Subjects were assessed on the basis of the *Matching Familiar Figures* task, which provides a measure of impulsivity during problem solving. Reading achievement was measured via the *Science Research Associates Achievement Test.* Results showed that on the *MFF,* learning-disabled subjects, as a group, were more likely to respond rapidly (impulsively) than normals and that severe LDs were more impulsive than mild LDs. Impulsivity scores were correlated with reading scores, indicating a relationship between problem-solving strategy and academic performance.

Silver, Archie A.; Hagin, Rosa A.; & Beecher, Ronnie. Scanning, diagnosis, and intervention in the prevention of reading disabilities: I. SEARCH: the scanning measure. *Journal of Learning Disabilities,* August/September 1978, *11,* 439-445.

Describes the development and use of SEARCH, a scanning instrument designed to locate children who will be vulnerable to learning failure. The instrument is an individually administered test consisting of ten subtests. It requires 20 minutes to administer and is designed for pre-first grade use. For each subtest, a vulnerable at or below score has been set at the lowest one-third of the distribution of scores. A total SEARCH score is then used to predict vulnerability. Standardization of the instrument was conducted using a sample of 2319 kindergarten children. Subjects ranged in age from 63 to 80 months. Reliability by test-retest of fifty children was .80; Kuder-Richardson reliability was .73. Predictive validity of SEARCH was studied against scores on the *Wide Range Achievement Test* (WRAT). At the end of grade 1, in five of the six schools used, 12 percent of the children who were predicted to achieve normally did not do so. By grades 2 and 3, this group of children had dropped to 5 percent. For children for whom the test predicted failure but who did not fail, the proportions ranged from 0 percent to 6 percent at the various schools.

Forness, Steven R.; Hall, Robert J.; & Guthrie, Donald. Eventual school placement of kindergartners observed as high risk in the classroom. *Psychology in the Schools,* July 1977, *14,* 315-317.

Focuses on observable kindergarten behavior to determine if it can be used to predict eventual educational risk. Subjects were forty children followed through the end of grade 2. School records were examined at completion of second grade by two education students. Information on special status such as retention or referral for remedial reading were noted. Anecdotal records were recorded and rated on a 4-point scale of educational risk. On the basis of the anecdotal information, all subjects not found to have special status were divided into two groups, risk and nonrisk. Correlation coefficients were then computed between the kindergarten observation categories of positive interaction, task attention, nonattention, and disruptive behavior and eventual second grade status. Significant differences were found in eventual special placement and in teacher anecdotal ratings. Attending behavior correlated -.47 with eventual risk.

Brenton, Beatrice White, and Gilmore, Doug. An operational definition of learning disabilities (cognitive domain) using WISC full scale IQ and Peabody Individual Achievement Test scores. *Psychology in the Schools,* October 1976, *13,* 427-432.

Attempts to devise an operational index of discrepancy between intellectual capacity and academic performance to aid in identification of learning disabilities (LD) in the cognitive domain. The discrepancy index was then applied to sixty children placed in seven LD resource rooms in one Michigan county to note its effectiveness. Subjects were fifty males and ten females who ranged in age from 6-2 to 13-5 and in IQ from 63 to 124. Full scale

WISC scores and Reading Recognition, Reading Comprehension, Spelling, and Mathematics subtest scores on the *Peabody Individual Achievement Test* (PIAT) were collected and used in computing an index to determine educationally discrepant scores. Using the index, forty of the children were classified as "may be LD," and twenty were termed "may not be LD." Of the forty classified as "may be LD," two had one educationally significant low PIAT subtest score, four had two low ones, twenty-one had three low subtest scores, and thirteen had four low subtest scores. Of the forty, thirty-seven or 93 percent had educationally significant low scores in PIAT Reading Recognition, thirty-five or 88 percent had low scores in Reading Comprehension, thirty-three in Spelling, and twenty-one in Mathematics. The authors point out that as many as one-third of the children measured were not LD in the cognitive domain.

CAMPBELL, DOROTHY. Mode of presentation and learning disabled and normal pupils' learning to reproduce and recognize new words (logographs). *Journal of Research and Development in Education, 9,* Monograph 1976, 31-32.

Attempts to clarify some of the issues involved in mode of presentation of words for learning disabled (LD) pupils. Subjects were LD and normal pupils presented with either a visual-visual or an auditory-visual word list treatment. Subjects responded with a reproduction or a recognition response. For both reproduction and recognition, no difference was noted as a result of different presentation conditions. Normal readers made more correct written responses than did LD pupils. No significant Groups x Treatments or Groups x Trials interactions were found.

IV-15 Socio-cultural factors and reading

ENTWISLE, DORIS R., & HAYDUK, LESLIE ALEC. *Too great expectations: the academic outlook of young children.* Baltimore: The Johns Hopkins University Press, 1978.

Describes the rationale, design, and results of investigations of the development of self-evaluation in young children. The primary source of evidence was derived from a study of pupils in three first grades (each comprising three or four classes) for one or two years from initial school experience. Subjects comprised three groups: two groups of White children living in middle class neighborhoods and a working-class neighborhood group composed of 60 percent Black and 40 percent White children. Extensive and detailed personal, sociological, and academic (including reading) findings are presented for each group, by cross-group comparison, and by developmental pattern. Results suggest that contrary to prevailing theory, Black and White working class children start school with unrealistically high rather than unrealistically low expectations, at least in terms of probable school fulfillment.

USOVA, GEORGE M. A synthesis of research on reading and the disadvantaged. *Reading World,* December 1978, *18,* 176-185.

Reviews studies conducted between 1967 and 1977 on the disadvantaged student and reading. The studies cover a broad spectrum, dealing with various age levels, ethnic groups, and treatment procedures.

Tarnopol, Lester; Tarnopol, Muriel; Breed, J. Scott; & Ozaki, Michael. Learning disabilities in minority adolescents. *Bulletin of the Orton Society,* 1977, *27,* 132-148.

Compares the group and individual test performance of seventy minority (Black) seventh grade pupils with histories of school maladjustment and/or delinquency with a control sample of thirty nondelinquent minority pupils from the same junior high school. Delinquent tending sample were significantly behind controls in (*Comprehensive Tests of Basic Skills*) reading, verbal and nonverbal *Lorge-Thorndike IQ,* school gpa, and visual-motor and auditory perceptual functioning as determined by a number of published tests of auditory and visual perceptual performance.

Nichols, Nancy J., & McKinney, Ann Watts. Black or white socioeconomically disadvantaged pupils—they aren't necessarily inferior, *Journal of Negro Education,* Fall 1977, *46,* 443-449.

Compares performance of 398 fourth and sixth graders from six schools located in an urban industrial area of New York. Data were gathered using the *Iowa Tests of Basic Skills, Coopersmith Self-Esteem Inventory* and *Lorge-Thorndike Intelligence Test.* No difference in academic progress or personality change could be isolated for race or parental economic dependence when effects of IQ were removed.

Rubin, Rosalyn A., & Balow, Bruce. Measures of infant development and socioeconomic status as predictors of later intelligence and school achievement. *Developmental Psychology,* March 1979, *15,* 225-227.

Studies 1382 children longitudinally in order to assess the ability of SES and mental development measures in predicting later intelligence and school achievement. The *Bayley Infant Scale of Mental Development* was administered at 8 months; the *Wechsler Intelligence Scale for Children,* the *Wide Range Achievement Test,* the *Metropolitan Readiness Test,* the *Illinois Test of Psycholinguistic Abilities,* the *Stanford Achievement Test,* and the *Socioeconomic Index* were also administered. The Bayley scale scores were associated with low performance on measures of intelligence and academic achievement at ages 4 through 9, whereas average or high Bayley scores were less clearly predictive of later development. SES was a better single predictor of outcome variables than was the Bayley. Results also indicated that high SES may obscure cognitive deficits associated with early developmental impairment.

Thompson, Bruce; Alston, Herbert L.; & Say, Michael W. Correspondence across three ethnic groups of constructs measured by the Iowa tests of Basic Skills. *Psychology in the Schools,* July 1978, *15,* 347-349.

Randomly samples and compares sixth grade performance of 310 Anglo, 368 Negro, and 189 Mexican American pupils from a southwestern metropolitan school system on reading and math subtests of the ITBS. Correlations for between group performance are reported as .59 to .63. Comparative results for tests and groups were not reported.

Hoover, Mary Rhodes. Community attitudes toward Black English. *Language in Society*, April 1978, *7*, 65-87.

Assesses the attitudes of 182 parents toward the use of Black English in spoken and written forms of communication. Interviewers went into the homes of ninety-seven parents from Title I school districts and eighty-five parents from non-Title I districts; all parents had either first or sixth graders in school currently. The dependent variable consisted of twenty-two variations of the major question: "Would you object to your child hearing/speaking/reading/writing standard and/or vernacular Black English in the home/school/community?" Results showed that parents interviewed do not "hate their language," as many linguists and educators have assumed. For the most part, subjects accepted vernacular Black English in the listening and speaking channels, but not in the reading and writing channels. Further, they accepted vernacular Black English in the home and some community contexts, but not in the schools nor in formal settings. An average of 85 percent of the parents interviewed accepted standard Black English in all domains, channels, and contexts and accepted the vernacular level in a number of contexts dependent on situation, topic, and person spoken to.

Madaus, George F.; Kellaghan, Thomas; & Rakow, Ernest A. School and class differences in performance on the leaving certificate examination. *The Irish Journal of Education*, Summer/Winter 1976, *10*(1 & 2) 41-50.

Examines variations in the scores of students in thirty-two post-primary boys' schools and relates these data to school and class differences. Subjects' scores on four standardized measures and on thirteen exit measures were partitioned into between-school, between-class-within-school, and within-class components. Significant proportions of between-school variance were associated with performance on four exit examinations. Evidence was found of school factors in association with class units as being effective in influencing achievement.

Crawford, John; Brophy, Jere E.; Evertson, Carolyn M.; & Coulter, Cynthia L. Classroom dyadic interaction: factor structure of process variables and achievement correlates. *Journal of Educational Psychology*, December 1977, *69*, 761-772.

Correlates patterns of pupil-teacher interaction with achievement gains among twenty-eight second and third grade teachers and their pupils. A total of twenty-one process variables measuring different aspects of the pupil-teacher interaction patterns were examined. Residual gain scores from the *Metropolitan*

Achievement Test were also analyzed. Although significant correlations were few in number, the data suggest that in higher socioeconomic status classes, verbal praise from the teachers was particularly ineffective; also, successful teachers in lower social status classrooms interacted privately with students. Effective teachers in both lower and higher social status classrooms placed an emphasis on fast-paced activities during reading groups.

BULCOCK, JEFFREY W.; CLIFTON, RODNEY A.; & BEEBE, MONA J. Reading competency as a predictor of scholastic performance: comparisons between industrialized and third world nations. In Dina Feitelson (Ed.) *Cross-cultural perspectives on reading and reading research.* Newark, Delaware: International Reading Association, 1978. 4-47.

Reports research rationale, an auxiliary model, mode of analysis, and reading-related findings upon science achievement for samples drawn from England, India, and the U.S. of 14-year-old male populations Variables assessed included father's occupation, parental education, number of siblings, and IEA test data for meaning vocabulary, thinking stage, reading comprehension, and science achievement. Results suggest that language and thinking, particularly reading, had more effect upon natural science performance than social factors for English and Indian.

MARJORIBANKS, KEVIN. Ethnicity, school attitudes, intelligence and academic achievement. *International Journal of Psychology,* 1978, *13*(3), 167-178.

Utilizes regession surface analysis to examine relations between school related attitudes, academic achievement, and intellectual ability for Australian pupils (age 11) of lower SES and different ethnic backgrounds. The total sample of 660 was composed of 250 Anglo-Australian, 170 Greek, 120 Italian, and 120 English background pupils. Measures included *Ravens Progressive Matrices; Australian Council* achievement tests, including reading and word knowledge; and a Likert-type questionnaire of school related attitudes and adjustment. Although the general findings reveal notable variation among pupils with different ethnic backgrounds, affective commitment and academic adjustment to school were influential across groups when treated for increments in intelligence.

BOWMAN, CLAIR MICHAEL, & FILLOS, RITA M. Examining school effects on achievement: a conceptual model and an example. *Journal of Educational Research,* November/December 1978, *72,* 68-75.

Describes a regression procedure which permits evaluation of contribution of school influence to variance in achievement growth. Data from cohort samples of 1255 and 1307 middle school sixth and seventh grade pupils included performance on the *Iowa Tests of Basic Skills* and the *Cognitive Abilities Test,* sex, SES, parental occupation, and the middle school attended were employed. Previous achievement and aptitude accounted for most of found variance with percent of variances for both sixth and seventh grades ranging from 63.5 to 73.0 for math, vocabulary, reading, and work-study. Addition of school vector produced variance contributions of 1 percent to 2.3 percent for reading, vocabulary, and study skills.

IV-16 Reading interests

WILCOX, LEAH. Choosing literature for young children. *Reading Improvement,* Fall 1977, *14,* 150-159.

Compiles a set of criteria for evaluating children's literature from a review of the writings of twelve authorities in the field, and then examines the extent to which these criteria are utilized in making book selections in Head Start Programs. The review of writings by authorities led to a listing of twenty-nine criteria recommended for selecting good books. These criteria were then sent in questionnaire form to directors of Head Start programs who were asked to indicate whether or not each criterion was used in the process of making book selections. The ratings as identified from the writings of authorities were then compared with responses from Head Start directors. In seventeen instances, there was a significant difference in the responses.

CARTER, SYLVIA M. Interests and reading. *Journal of Research and Development in Education.* Spring 1978, *11,* 61-68.

Overviews reading interest research. Includes categories on procedures in reading interest research, selected research studies, and an historical perspective.

GREENLAW, M. JEAN, & WIELAN, O. PAUL. Reading interests revisited. *Language Arts,* April 1979, *56,* 432-434.

Investigates the kinds of literature categories generated by over 2,000 students in grades one through 8. During a 6-month period 500 trade books were distributed to a cross-section of Georgia elementary and middle schools. Students either read the books or listened when books were read to them and later responded to open-ended questions concerning the rating they would give the book and reasons for liking or disliking the book. Categories were determined by the positive and negative judgments. Based upon 375 books which were continuously chosen, fifteen categories were identified. It was concluded that elementary students perceived story content in terms of literary type.

FAVAT, ANDRÉ F. Child and tale: the origins of interest. (No. 19 in a series of research reports sponsored by the NCTE Committee on Research) Urbana, Illinois: National Council of Teachers of English, 1977.

Investigates the reasons for children's interest in fairy tales. Examines the problems involved in studying children's reading interests and suggests a methodology for future analytic studies.

STANCHFIELD, JO M., & FRAIM, SUSAN R. A follow-up study on the reading interests of boys. *Journal of Reading,* May 1979, *22,* 748-752.

Compares the current status of 200 junior high boys' reading interests with the findings of a similar study conducted approximately ten years previously. Questionnaires listing the same fifty topics and twenty characteristics were administered orally by teachers. Eight of the first twelve categories and seven of the upper ten characteristics remained among the favorites. An increase in interest was shown for the topics of automobiles, occupations, music, and travel; outer space dropped rather dramatically as a topic of interest. Increases in interest were noted for the characteristics of frightening aspects; qualities such as anger, cruelty, and the like; and familiar experiences.

TAYLOR, NANCY, & WAYNANT, PRISCILLA PILSON. Reading logs reflect students' real world reading needs. *The Reading Teacher,* October 1978, *32,* 7-9.

Describes the results of a study calling for grade one, 3, and 9 pupils to maintain a log of their daily reading for a period of one week. One suburban classroom at each grade level was involved. The logs were a free response record of what was read. At grade one level, such items as product names, street signs, stickers, and game and kit directions were listed. In addition, more traditional sources such as magazines, comics, newspapers, and library books were mentioned. By grade 3, pupils began listing maps, TV guides, crossword puzzles, love notes, telephone directories, cookbooks, and trade books along with school related reading tasks. The reading of ninth graders showed increasing sophistication and changing needs and interests. They included the reading of soccer schedules, smoking information pamphlets and a large number of school-related tasks.

SWAIN, EMMA HALSTEAD. Using comic books to teach reading and language arts. *Journal of Reading,* December 1978, *22,* 253-258.

Samples 169 students in grades 4 through 12 for their opinions regarding the use of comic books in language arts classes. Students in the study were grouped as either elementary, junior high, or secondary level; subjects were further differentiated as high or low achievers in school. A high percentage of subjects across different grades and irrespective of achievement levels reported reading comic books and comic strips; most indicated that reading comics had no ill effect on their reading of other kinds of materials. Students in the study were also able to report specific facts and knowledges they had acquired from reading comics. The author provides a list of twenty suggestions regarding the use of comic books and comic strips in the classroom.

WESTERN, LINDA E. Magazine preferences of fourth- and sixth-grade children. *The Elementary School Journal,* May 1979, *79,* 285-291.

Investigates the magazine reading interests of 761 students in grades 4, 5, and 6 in thirty-two classrooms of two metropolitan districts in Wisconsin. Sample copies of nineteen magazines were shown to the children who indicated on a questionnaire if they had read each magazine, if they liked it, and where they obtained it; they also listed other magazines which they read. The responses for each magazine were totaled for all pupils, for boys and girls, and for each grade level. The findings showed that the subjects were familiar with many magazines, liked best nonfiction and humor magazines, and revealed sex and grade level differences in their preferences. The differences in magazine preferences were due more to sex than to age. Familiarity with the magazines did not guarantee interest in them. These children obtained their magazines from a variety of sources.

Fisher, Carol J., & Natarella, Margaret A. Of cabbage and kings: or what kinds of poetry young children like. *Language Arts,* April 1979, *56,* 380-385.

Inquires about the kinds, elements, subjects, and forms of poetry children in the first, second, and third grades prefer. Fifteen classes in one Georgia county listened to and rated seven poems on tapes each day for eight days. In general, the subjects liked the poems, with only 24 percent of the responses being negative. They preferred narrative poems, rhyme and meter, sound elements, content about children, humor. They gave lower ratings to lyrics, free verse, haiku; poetry depending upon word-play; free verse; metaphorical language; nature content. Differences were found in preferences at different grade levels.

Ross, Campbell. A comparative study of the responses made by grade 11 Vancouver students to Canadian and New Zealand poems, *Research in the Teaching of English,* December 1978, *12,* 297-306.

Examines the questionnaire and free written responses of 477 Canadian eleventh graders to twelve pairs of unfamiliar Canadian/New Zealand-authored poems presented by recordings and read privately. Pupils did not differentiate significantly between unidentified Canadian and New Zealand poems, responded more to poems they favored, and favored both Canadian and New Zealand poems when provided extrinsic knowledge (correct and incorrect) that the poem was Canadian.

Fraser, Barry J., & Northfield, Jeffrey R. Student preferences for different sources of scientific information. *The Australian Journal of Education,* 1978, *22*(1), 83-89.

Gains information about the preferences of 780 seventh grade students in thirty-one different classes in Melbourne for four different sources of scientific information: experiments, experts, books, teachers. The subjects responded to an attitude scale both as a pretest at the beginning of the year and as a posttest at the end of the year. Students at both times preferred the foregoing sources in the following order: conducting experiments, consulting experts, reading books, asking teachers. Significant declines occurred during the school year towards the latter two sources. Significant relationships were found between teacher sex and student changes in attitude to reading a book, and teacher experience and student change in attitude to asking a teacher.

Myatt, Barbara, & Carter, Juliet Mason. Picture preferences of children and young adults. *Educational Communication and Technology,* Spring 1979, *27,* 45-53.

Defines six types of illustrations found in school library books and identifies preferences for these types by 280 students in grades K, 1, 3, 5, 9, and 11 (twenty boys and twenty girls at each level) in a suburban-rural school system. Examples of the six types of illustrations were shown on slides by pairs to the subjects who indicated their preferences. Significant differences were found between grades and between sexes. Photographs were preferred at all grade levels except at kindergarten, when children chose line drawings the most frequently. Full line drawing and painterly followed photographs in preference. Sex differences appeared greatest in grades 1, 2, 3, and 9 photographs (boys' preference) and in grades 1, 2, and 9 for line drawings (girls' preferences).

BELLONI, LORETTA FRANCES, & JONGSMA, EUGENE A. The effects of interest on reading comprehension of low-achieving students. *Journal of Reading,* November 1978, *22,* 106-109.

Examines the interaction between reading interests and reading comprehension among fifty seventh graders. Low achievers were exposed to a collection of twelve short stories based upon research of adolescent reading interests; these stories were further categorized according to sex differences in reading interests. Reading difficulty of the stories ranged from two to four grade levels above the mean reading level of the students in the sample. Subjects were instructed to preview the titles and abstracts and select the one story they would least like to read. Subjects then read the stories they selected and were administered a cloze test with fifty deletions of each story. Results indicated that low-achieving seventh grade students comprehended material they considered highly interesting better than they comprehended low-interest material. The results also suggested that the subjects transcended their frustrational reading levels when reading materials that were highly interesting to them. No differences were revealed with regard to boys' versus girls' performances.

FRASHER, RAMONA S. & FRASHER, JAMES M. Influence of story characters' roles on comprehension. *The Reading Teacher,* November 1978, *32,* 160-164.

Investigates the sex-typed content preferences and their effect on comprehension among 162 children, ages 9 through 12. Each student read two stories about a same-sex fictional child; fictional characters differed with regard to degree of traditional sex role bahavior. Subjects were administered comprehension tests after reading, and indicated story and character preferences. Boys were equally interested in the traditional and nontraditional stories; yet, their comprehension was better for the nontraditional story. Girls preferred the nontraditional story and performed better in comprehension with the nontraditional stories.

LAMARRE, GILBERT O. An investigation of factors that influence ninth grade boys who are capable readers to seek or avoid reading as a leisure-time pursuit. *New England Reading Association Journal,* 1978, *13,* 20-25.

Examines leisure reading characteristics of thirty-one capable readers (four or more hours of leisure reading per week) and forty-one capable nonreaders. Subjects were ninth grade males from upper middle class homes, above 115 IQ, and with reading scores at least two years above grade placement. Data were collected through student and parent questionnaires, daily leisure-time logs, and book and library logs. Results indicate that "readers" and "nonreaders" were not differentiated by amount of leisure time, parent attitude, television viewing or radio listening, sports activity, amount of travel, or library visitations. Leisure readers spent significantly more time on hobbies than nonreaders, but the parents of nonreaders spent more time on leisure reading, hobbies, and sports than the parents of readers. Mean hours of leisure reading (beyond academic demands) for the subjects were: readers (7.7), nonreaders (2.61).

Heathington, Betty S. What to do about reading motivation in the middle school. *Journal of Reading,* May 1979, *22,* 709-713.

Questions 254 students in grades 5 through 8 about attitudes and habits related to reading. Their responses were to be used in the planning of a reading program or adding motivation to the present one. The subjects represented a range of achievement levels from both rural and urban schools and socioeconomic levels. It was concluded that their reading is influenced by the physical, emotional, social, and intellectual changes associated with this group: lack of time and books on topics they prefer, interruptions when they read, and poor reading ability. They also wished to select their own reading materials.

Landy, Sarah. Why Johnny can read . . . but doesn't. *Canadian Library Journal,* October 1977, *34,* 379-387.

Explores the differences between readers (those who read two or more books a week) and nonreaders (those who read two books a year or fewer) among 573 Canadian seventh grade students. The study used survey, statistical, and case study techniques and considered 157 variables. Visits were made to the two schools that produced the most readers and to the two with the most nonreaders, and observations were compared. The results of multivariate statistical analyses showed the three best discriminators of reading behavior were sex, literacy, and the number of books in the home. Other important discriminators were level of reading ability, IQ, a quiet place for reading, child's use of spare time, and of the library, the family's use of the library, and the types of materials preferred.

Frasher, Ramona S. Know your reluctant reader's interests. *Reading World,* October 1978, *18,* 67-71.

Proposes that interest in reading may be stimulated by capitalizing on the personal interests of reluctant readers and orienting the reading program and other curriculum areas around these interests. The rationale for this proposal is based on a review of related research.

Teachers' Training College Research Unit. *Reading Interests.* Singapore: Stamford College Press, 1970.

Constructs and uses a survey questionnaire to determine the reading interests of 1,589 children in Primary 3 to Primary 6 grades in Singapore. Patterns in reading of children in three language media (English, Malay, and Chinese) were compared. The subjects were asked questions concerning the popularity of the national, mobile, school, and class libraries; the most popular types of reading materials; the preferred environment for reading; uses made of dictionaries and encyclopedias; preference for reading or televiewing. Except in the Malay group, few sex differences were noted. Percentages of subjects reading books in a second language were not high. They preferred class libraries, reading more than televiewing, reading newspapers and fiction, and a quiet place for reading.

Jordon, R. R. The reading interests of lower secondary-school children in Africa and Asia. *English Language Teaching Journal,* January 1978, *32,* 143-151.

Investigates the reading interests of 1,602 secondary students between the ages of 10 and 14 in Nigeria, Iran, India, Nepal, Pakistan, and Sri Lanka. A questionnaire which quizzed students on preferred types of stories and preferred settings was administered. Typically, students in the study were most interested in story settings outside their native countries. There was also less interest in neighboring countries than in faraway countries. Preferred story types included adventure stories, animal stories, and stories about children; informational reading was preferred by only 4 percent of the sample. Differences between boys and girls with regard to types of preferred reading are reported.

IV-17 Attitudes and affect toward reading

Tierney, Robert J. Motivating the superior reader. *Journal of Research and Development in Education,* Spring 1978, *11,* 75-79.

Addresses two questions: what are the characteristics of the mature or superior reader, and how might learning environments be structured or created to develop these characteristics? Incorporates research findings.

Brown, Merril. Measuring attitudes to reading—more questions than answers. *Reading,* April 1979, *13,* 13-20.

Reviews research on the relation of attitude measurement to reading.

Koenke, Karl. Motivation and reading. *Language Arts,* November/December 1978, *55,* 998-1002.

Compiles some research findings on motivation and reading.

Myers, Meyer, II, & Paris, Scott G. Children's metacognitive knowledge about reading. *Journal of Educational Psychology,* October

1978, *70,* 680-690.

Assesses awareness of variables that influence reading through tape recorded interviews with twenty second and twenty sixth graders. Results are reported for each of eighteen items of the interview instrument which reflected self-perception of personal abilities, tasks, and cognitive strategies during reading. In general, the results suggest that both groups were aware of the influence of interest, familiarity, and length of material on performance, but younger subjects were less sensitive to semantic structures, goals of reading, and alternate strategies for dealing with comprehension difficulty.

SEATON, HAL W., & AARON, ROBERT L. Modification of pupil attitude toward reading through positive reinforcement scheduling. *Reading Improvement,* Summer 1978, *15,* 96-100.

Attempts to determine if an increase in teachers' positive reinforcing behaviors toward pupils engaged in sustained silent reading would affect the pupils' attitudes toward reading. Subjects were 543 children in grades 3 through 7, and twenty of their teachers. School principals were taught to conduct observations of teachers in which teacher comments, facial expressions, physical contact with students, and eye contact were recorded and grouped into "positive" or "negative" categories. The *Estes Attitude Scale* was administered pre- and post- as the measure of students' attitudes toward reading. Teachers were exhorted to reinforce positively silent reading behaviors. At the end of three months, final attitude data were collected. There did not exist a significant correlation between teacher reinforcement schedule and pupil attitude toward reading. Male third graders were, however, affected in their attitudes by provision of teacher reinforcement.

MATHEWSON, GROVER C. The moderating effect of extrinsic motivation upon the attitude/comprehension relationship in reading. In Clifford Pennock (Ed.) *Reading comprehension at four linguistic levels.* Newark, Delaware: International Reading Association, 1979. 8-20.

Examines the effect on comprehension of extrinsic motivation with ninety fourth graders. Subjects read stories they liked and disliked; subjects were extrinsically motivated by 1) the experimenter indicating there would be a test after reading or 2) the experimenter introducing reading material as something subjects might like to read. Subjects were further, for purposes of analysis, grouped by reading ability. Comprehension of both liked and disliked stories was high under strong extrinsic motivation. Under low extrinsic motivation, the comprehension of both liked and disliked stories was low. Under moderate extrinsive motivation, liked stories were comprehended better.

WALLBORN, FRED H.; BROWN, DOROTHA H.; & ENGIN, ANN W. A factor analysis of reading attitudes along with measures of reading achievement and scholastic aptitude. *Psychology in the Schools,* April 1978, *15,* 160-165.

Investigates the interaction of reading achievement, scholastic aptitude, and attitude toward reading among 600 intermediate grade students. Subjects were administered the *Survey of Reading Attitudes* scale, the *California Short-Form Test of Mental Maturity*, the *Henman-Nelson Tests of Mental Ability*, and the Reading Vocabulary and Comprehension subtests of the *Comprehensive Test of Basic Skills*. Data were then factor analyzed. The factor structure showed a reading achievement factor along with the following eight dimensions of reading attitude: 1) expressed reading difficulty, 2) reading as direct reinforcement, 3) reading as enjoyment, 4) alternative learning modes, 5) silent vs. oral reading, 6) reading anxiety, 7) reading group, and 8) comics.

Ryle, Anthony, & MacDonald, Janet. Responses to reading as perceived by boys with and without specific reading retardation and behavioral disorders: a repertory grid study. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, October 1977, *18*, 323-334.

Compares a sample of sixteen junior and special school boys who showed eighteen months reading retardation with sixteen boys making normal progress in reading. Ss were matched on WISC full scale IQ. Controls scored significantly higher on verbal IQ. The problem group scored significantly higher on neurotic and anti-social subscales of the Rutter inventory. Comparisons were made through use of a consequences grid which provided a summary of a subject's perceptions of responses to his behaviors. Problem boys perceived less positive response to reading from self, teacher, parent, and peers. Retarded readers' judgments of own behaviors were closer to assessment by peers and further from adult assessment than for the controls.

IV-18 Personality, self-concept and reading

Helson, Ravenna. The imaginative process in children's literature: a quantitative approach. *Poetics*, June 1978, *7*, 135-153.

Identifies stylistic patterns in ninety-eight fantasy books for children and examines relationships demonstrated between characteristics of books and personalities of authors. Thirteen judges rated ninety-eight fantasy books for children on a descriptive inventory; the inventory included an adjective checklist and a ranking of motives and needs applied to the sample books. Then fifty-seven authors of the books agreed to respond to a series of inventories and questionnaires including personality characteristics and vocational interests. An additional analysis of nineteenth century children's books identified as creative was conducted for comparison purposes. Also studied were critics of children's literature and articles by them. In both work style and personality, authors of heroic fantasy differ from authors of tender fantasy along the dimensions of ego-assertiveness, self-discipline, and investment in challenge. Although these differences tend to distinguish the two groups at both the middle and high levels of creativity, the authors of highly creative fantasy are the more consistent. Critics showed higher scores than authors on social interests. Authors of fantasy as a group were more oriented to inner life than were critics. Additional results are discussed.

BACKER, JACQUELIN C.; WOODEN, SHARON; & MULLER, DOUGLAS. Individualized, success oriented instructions in achievement and self-concept of first graders. *Perceptual and Motor Skills,* December 1977, *45,* 721-722.

Examines the effect on self-concept and achievement of providing success-emphasizing instruction among forty-five first graders. Subjects were exposed to an academic curriculum that focused on reading readiness and language development. Half of the sample was in a traditional classroom while the other half received instruction in an enriched classroom that emphasized individualization and an atmosphere of support, warmth and success. All subjects were administered the *Metropolitan Readiness Tests* and the *Primary Self-concept Inventory;* treatment continued from September until May. Subjects from the success-emphasizing classrooms showed readiness gains over the controls in listening and matching skills. No differences between the two groups were revealed with reference to self-concept.

RUBIN, ROSALYN A.; DORLE, JEANNE; & SANDIDGE, SUSANNE. Self-esteem and school performance. *Psychology in the Schools,* October 1977, *14,* 503-507.

Examines the interrelationship among reading, self-esteem, intelligence, and other variables with 530 twelve-year-olds. Reading was assessed by the *Wide Range Achievement Test* (WRAT) and the Word Meaning subtest of the *Stanford Achievement Test* (SAT); self-esteem with the *Coopersmith Self-Esteem Inventory*; and intelligence with the *Weschsler Intelligence Scale for Children.* In addition, teacher ratings of behavior on two different scales were collected. Self-esteem was found to have a moderate relationship with, but not a strong independent effect upon, school achievement and behavior. IQ was the best single predictor of academic achievement, showing a coefficient of .45 with SAT Word Meaning and .39 with WRAT Word Recognition. From multiple correlation coefficients predicting school success from measures of SES, IQ, and self-esteem, it was concluded that much of the relationship between self-esteem and school performance for the general school population can best be explained as reflecting common underlying factors such as ability and background.

SCHEIRER, MARY ANN, & KRAUT, ROBERT E. Increasing educational achievement via self-concept change. *Review of Educational Research,* Winter 1979, *49,* 131-149.

Considers literature linking self-concept and academic achievement, reviews the evaluation research on educational intervention programs which have focused on self-concept change, and analyzes the evidence in terms of several self-concept theories. Some reference is made to reading achievement.

MANGIERI, JOHN N., & OLSEN, HENRY D. Self-concept-of-achievement ability and reading proficiency of black and white males in an adult education course. *The Journal of Negro Education,* Fall 1977, *46,* 456-461.

Investigates the existence of a relationship between reading ability and self-concept of academic ability for 188 Black and White male adult basic education students. Students ranged in age from 17 to 45 and were grouped into four categories: Blacks reading either above or below grade level, and Whites reading either above or below grade level. Subjects were administered the *Nelson-Denny Reading Test* and the *Michigan State Self-Concept of Academic Ability Scale* (SCOAA). Findings indicated that students with low reading ability tended to score lower on the SCOAA than did subjects who read above grade level. White males had significantly lower SCOAA scores than blacks. Additional results are reported.

RUBIN, ROSALYN A. Stability of self-esteem ratings and their relation to academic achievement: a longitudinal study. *Psychology in the Schools,* July 1978, *15,* 430-433.

Investigates the relationship between self-concept and achievement, as well as the stability of self-concept among different age levels of students; 380 nine-through 15-year-olds participated. Subjects were administered the *Stanford Achievement Tests* and the *Coopersmith Self-Esteem Inventory (SEI);* Group A was given the measures at ages 9 and 12, while Group B was given the measures at ages 12 and 15. Older subjects demonstrated greater test consistency on the SEI. Correlations between the SEI and school achievement scores also increased over the age range from 9 to 15.

CARSETTI, JANET. Self-concept and self-fulfilling prophecy. *Reading News* (Newsletter of the College Reading Association). September 1978, *7,* 1.

Reports the results of Project READ study dealing with self-concept among 7,000 students, aged 8 to 18, who were below expectancy in reading ability. Subjects were all within the juvenile justice system and, on the average, were two years below potential reading level. Half scored below the "acceptable range" on the *Piers-Harris Self-Concept Scale.* Half responded "yes" to the "I am a good reader" statement, and half responded, "no." When pre- posttest data after four months were compared for the good and poor readers, it was found that good readers gained three months more than poor readers in reading. The good readers also did significantly better in consonant blends, but there was no difference in consonants and rhyming words between the two groups. On a test of intelligence, good readers showed a seven-month gain while poor readers lost a month.

MULLER, DOUGLAS; CHAMBLISS, JACK; & WOOD, MARTHA. Relationship between area-specific measures of self-concept, self-esteem and academic achievement for junior high school students. *Perceptual and Motor Skills,* December 1977, *45,* 1117-1118.

Correlates physical maturity, peer relations, academic success and school adaptiveness self-concept/self-esteem measures with reading, language, math, and composite achievement scores for seventy-four junior high school students. Reading and other academic measures were assessed by the *Comprehensive Test of Basic Skills.* Academic success self-concept was significantly correlated with each of the achievement measures. Coefficients ranged from .32 to .39. Peer relations self-concept and self-esteem correlated with language (r=.28), math (r=.33), and composite achievement (r=.30). Academic success self-esteem measures did not correlate with any of the measures of achievement.

SHEARE, JOSEPH B. The impact of resource programs upon the self-concept and peer acceptance of learning disabled children. *Psychology in the Schools,* July 1978, *15,* 406-412.

Measures the impact of resource interventions upon the level of peer acceptance and self-concept of 82 elementary school pupils. No significant changes were obtained on the *Piers-Harris Children's Self-Concept Scale* administered before and after a year of resource room intervention program for forty-one learning disabled children and for forty-one randomly selected normal progress learners. No self-concept differences were detected between sexes, but the learning disabled pupils produced significantly lower self-concept scores. Significant differences in peer acceptance as measured by the *Peer Acceptance Rating Scale* obtained between the LD and normal progress groups. Both groups received higher acceptance ratings in the post-program testing. The year of resource room experience did not result in significant changes in self-concept or peer acceptance for the LD group.

CHAPMAN, JAMES W., & BOERSMA, FREDERICK J. Academic self-concept in elementary learning disabled children: a study with the Student's Perception of Ability Scale. *Psychology in the Schools*, April 1979, *16*, 201-206.

Compares academic self-concept obtained on a researcher-developed instrument, *Student's Perception of Ability Scale,* for eighty-one grade 3 to 6 pupils underachieving in a basic school subject by one and one-half to two and one-half years with eighty-seven randomly selected normal-progress pupils drawn from the same classes. The underachievers held significantly more negative self-perception of ability in reading, spelling, and arithmetic; less confidence in general school functioning, more negative attitude toward school in general, and lower self-perception of general ability. Grade level differences were not significant, but girl self-perception of penmanship and neatness was significantly higher than that of boys.

NICHOLLS, JOHN G. Development of perception of own attainment and causal attributions for success and failure in reading. *Journal of Educational Psychology,* February 1979, *71,* 94-99.

Traces the cross-sectional developmental nature of children's explanations of their own reading successes and failures in 540 New Zealand children from five classrooms each of the second, fourth, sixth, and eighth years of formal schooling. Self-perception of attainment and causal attribution were assessed through informal schematic rating scales and paired choice questionnaire. Achievement in reading was determined by teacher ranking. Observed correlation between child and teacher rating of reading attainment improved from negligible for young children to significantly high positive in the older population. Girls were rated higher by themselves and by their teachers and were more prone to explaining their reading performance in terms of ability.

McIntire, Walter G., & Drummond, Robert J. Multiple predictors of self-concept in children. *Psychology in the Schools,* July 1977, *14,* 295-298.

Assesses the relative contributions of selected personality characteristics, school achievement, intelligence, sex, and ethnic background to self-concept among 144 fourth graders. Test instruments included the *Piers-Harris Children's Self Concept Scale* score as the dependent variable and the *Children's Personality Questionnaire, SRA Achievement Series* (1971), and the *Otis-Lennon Mental Ability Test* (1967) scores as independent variables. A stepwise regression analysis produced a multiple R of .72 for all independent variables with self-concept and accounted for 52 percent of the variance. Achievement variables account for 1.4 percent, sex for 1.4 percent, and ethnic membership for .8 percent of the variance. SRA reading scores contributed less to total variance than SRA math and language scores.

Bruininks, Virginia L. Peer status and personality characteristics of learning disabled and nondisabled students. *Journal of Learning Disabilities,* October 1978, *11,* 484-489.

Explores the peer status, perceived peer status, self-concept, friendship preferences, and interpersonal needs of 162 elementary students identified as learning disabled or nondisabled according to USOE definition. Instruments included *Peer Acceptance Scale, Coopersmith Self-Esteem Inventory,* and *Fundamental Interpersonal Relations Orientation-Behavior.* Results indicate that pupils identified as learning disabled pupils were significantly less popular, held poorer self-concept, were less accurate in assessing own social status, tended to give higher social rankings to themselves and others, and had a higher expressed need for control in social situations.

Robyak, James E., & Downey, Ronald G. Effectiveness of a study skills course for students of different academic achievement levels and personality types. *Journal of Counseling Psychology,* November 1978, *25,* 544-550.

Conducts a study to determine the effectiveness of a study skills program for students who differ in both personality type and academic achievement. Subjects were sixty-one undergraduates who were classified as underachieving or as academically apprehensive by comparing their actual grade point average (GPA) with the predicted GPA from a standard regession equation. Personality type was determined by scores on the MBTI, a self-report personality inventory. Subjects were judges or perceivers based on the MBTI. In addition to GPA data, the dependent measures included the *Survey of Study Habits and Attitudes* (SSHA), the Study Skills Information (SSI) section of the *Study Skills Test,* and the *Mooney Problem Checklist.* When covariance techniques were used to eliminate precourse differences, the Study Skills course was found to be equally effective for all groups. Generally, subjects seemed to increase their knowledge of study skills, use of study habits, and GPAs, but they reported little change in their study attitudes or in the number of adjustment problems.

SOWELL, VIRGINIA, & BURGIN, ANN. Locus of control in high-achieving and low-achieving junior college males. *Texas Tech Journal of Education,* 1979, *6*(1), 63-70.

Compares the results of the *Rotter (Internal-External) I—E Control Scale* obtained by 123 junior college students with ACT composite scores below 15 and below college level reading ability as measured by the *Nelson-Denny* with those I—E (internal-external locus of control) scores for fifty-nine junior college students with ACT scores of 16 and above. No significant differences were obtained; both groups scored within the internal control range.

STEWART, DAVID W., & LOUISA, VALENTINO. Intelligence, academic achievement, and personality: a canonical variate analysis. *Psychology in the Schools,* October 1976, *13,* 468-470.

Relates intelligence and achievement scores to the personality profiles of a clinical population of 180 emotionally disturbed adolescents. Subjects were administered the *Wide Range Achievement Test,* the WAIS or WISC and the *Cattell Junior-Senior High School Personality Questionnaire or California Psychological Inventory.* Results of a canonical variate analysis indicate that the more intelligent and higher achieving emotionally disturbed adolescent tends to be low in ego strength, tense, guilt prone, sensitive and submissive. The intelligence subtest of the personality questionnaire manifested the highest overall correlation with the canonical variate.

MARGOLIS, HOWARD; PETERSON, NEDRA; & LEONARD, H. SKIPTON. Conceptual tempo as a predictor of first-grade reading achievement. *Journal of Reading Behavior,* Winter 1978, *10,* 359-362.

Examines the utility of a measure of conceptual tempo taken in kindergarten for predicting middle-of-first-grade reading achievement. The fifty-two subjects were administered the *Matching Familiar Figures* test in kindergarten as an index of conceptual tempo (impulsivity/reflectivity); in February of grade one, subjects were administered the *Gates-MacGinitie Reading Test.* Additionally, different classification procedures for grouping children into impulsive and reflective subgroups were examined. Regardless of the classification procedure, conceptual tempo did not significantly influence reading achievement. When equated for kindergarten reading readiness scores, significant vocabulary and comprehension differences were not found for tempo, sex, or interaction.

Margolis, Howard, & Brannigan, Gary C. Conceptual tempo as a parameter for predicting reading achievement. *Journal of Educational Research,* July/August 1978, 71, *342-345.*

Compares twenty-two impulsive and twenty-two reflective kindergartners to determine if conceptual tempo is a viable predictor of reading readiness scores or reading achievement scores. Subjects were administered the *Matching Familiar Figures* test, the *Metropolitan Readiness Test,* the *Gates-MacGinitie Reading Test,* and a variety of other intellectual and skill measures. It was found that with substantial amounts of variance accounted for, the predicted scores differed by more than one-half a standard deviation in 66 percent of the comparisons, by one or more standard deviations in 44 percent of the comparisons, and by one and one-half standard deviations or more in 22 percent of the comparisons. The authors interpreted the results as supporting the contention that conceptual tempo be considered a dimension when predicting readiness or beginning reading performance.

Readence, John E., & Baldwin, R. Scott. Effects of impulsivity-reflectivity and type of phonics instruction on reading achievement. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978. 36-40.

Reanalyzes data from a prior study of 260 second graders classified as impulsive or reflective in cognitive style; subjects were given either analytic or synthetic phonics instruction. The *Gates-MacGinitie Reading Test* was used to measure vocabulary and comprehension. The *Matching Familiar Figures Test* was used to measure impulsivity-reflectivity. In the reanalysis, difference scores were examined. Reflectives were found to be high in reading comprehension under an analytic approach and high in vocabulary when taught by a synthetic approach. Impulsives demonstrated a reverse achievement pattern.

Readence, John E., & Baldwin, R. Scott. The relationship of cognitive style and phonics instruction. *Journal of Educational Research,* September/October 1978, *72,* 44-52.

Examines the reading achievement patterns of impulsives and reflectives under varying phonics approaches in beginning reading instruction; 170 second graders participated in the study. Subjects were classified as having an impulsive or reflective cognitive style and as receiving analytic or synthetic phonics instruction. Achievement in vocabulary and comprehension was measured by the *Gates-MacGinitie Reading Test.* Results supported the hypothesis that reflectives tend to be better readers than impulsives. However, multivariate analyses indicated reflectives in the synthetic approach performed significantly better than impulsives only in vocabulary. Under an analytic approach, the reverse was true; reflectives were signficantly better only on the variable of comprehension.

IV-19 Readability and legibility

Foster, Jeremy J. Locating legibility research: a guide for the graphic designer. *Visible Language,* Spring 1978, *12,* 201-205.

Provides a listing of journals most likely to be useful to the individual wishing to keep abreast of legibility research. The list is based on legibility research published between 1972 and 1976.

Harris, Albert J., & Jacobson, Milton D. A framework for readability research: moving beyond Herbert Spencer. *Journal of Reading,* February 1979, *22,* 390-398.

Places readability in historical perspective, suggests an organizing principle for research priorities, and applies this principle to identify future needs.

Entin, Eileen B., & Klare, George R. Factor analyses of three correlation matrices of readability variables. *Journal of Reading Behavior,* Fall 1978, *10,* 279-290.

Compares the results of principal-component solution factor analyses of correlation matrices developed by three prior and independent investigators of readability who used varied types of prose and differing readability index variables. Despite the extensive assortment of linguistic components involved, the traditional components of word difficulty and sentence difficulty were dominant, accounting for cumulative variances of 53 percent, 78 percent, and 89 percent. Two additional factors, idea density and word diversity, accounted for small but notable variance.

Carver, Ronald. Measuring readability and reading ability in order to predict comprehension. In Wallace D. Miller & George H. McNinch (Eds.). Reflections and investigations on reading. *Twenty-fifth Yearbook of the National Reading Conference,* 1976. 293-297.

Reviews problems in research for predicting percentage of comprehension when reading a passage once, taking into account material difficulty and individual ability. Previews a measurement procedure which might provide a solution.

Frase, Lawrence T., & Schwartz, Barry J. Typographical cues that facilitate comprehension. *Journal of Educational Psychology,* April 1979, *71,* 197-206.

Investigates in five studies the facilitating effects of phrase segmentation and indentation on the comprehension of a total of 72 adults. Subjects verified sentences by reading complex information in several technical passages. Meaningfully segmented and indented text resulted in from 14 percent to 18 percent faster response times than standard text. Both segmenting and indenting significantly influenced performance; however, once a text had been meaningfully segmented, the addition of indentation cues did not significantly affect response time.

ELKINS, JOHN, & DAVIES, GRAEME. Logical connectives and readability of textbooks. *Reading Education,* Spring 1978, *3,* 15-23.

Assesses the influence of logical connectives on readability of three content textbooks with thirty-three grade 8 students. Passages from the texts were clozed in two ways: a standard fifth-word-deletion pattern and a deletion of logical connectives. The clozed passages were then administered to students in the study and percentages calculated. On the standard cloze passage, 97, 91, and 24 percent of the students were at frustration level in the English, history, and science textbooks, respectively. In two of the texts (English and history), comprehension of logical connectives was considered to be at frustration level. Overall, however, logical connectives alone did not appear to account for differences in readability. Logical connectives rated as "difficult" and "easy" based on cloze performance of subjects are listed.

FRY, EDWARD; WEBER, JANE; & DEPIERRO, JOSEPH. A partial validation of the kernel distance theory for readability. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978, 121-124.

Reports the methods and results of two studies intended to verify the hypothesis that ease of sentence reading is directly related to the nearness of kernel (subject, verb, and object elements) to the beginning of the sentence and to the nearness of these elements in the kernel. Using sixteen pairs of sentences, Depierro (1976) compared sentence reading rate and accuracy of oral recall by thirty elementary and thirty college students. In a related study, Weber (1977) used 105 junior college subjects, fifty-two reading below score 43 on the *ETS Guidance and Placement* battery and fifty-three scoring above 43, to judge the comparative difficulty of thirty-two pairs of sentences. Results of the two studies were in basic agreement: distance between subject and verb significantly increases difficulty of a sentence. No sentence difficulty support was found in distance between verb and object or distance before or after kernel.

HOLBROOK, MORRIS B. Effect of subjective verbal uncertainty on perception of typographical errors in a proofreading task. *Perceptual and Motor Skills,* August 1978, *47,* 243-250.

Correlates proofreading response of 104 graduate students when task involved detecting errors in two passages that were experimentally varied so that one involved low-uncertainty (simple syntax) and one high-uncertainty (convoluted, complex syntax). Typographical errors were systematically introduced to the two experimental passages. Cloze test analysis was used to determine subject verbal uncertainty. Findings were somewhat inconsistent between the two tasks, perhaps as a product of experimental contamination. In general, the hypothesis that subjective verbal uncertainty facilitates the detection of errors in a proofreading task was supported.

HOLBROOK, MORRIS B. Effect of subjective interletter similarity, perceived word similarity, and contextual variables on the recognition of letter substitutions in a proofreading task. *Perceptual and Motor Skills,* August 1978, *47,* 251-258.

Relates the ability of nineteen college-educated subjects to recognize systematic letter sustitution errors in a capitalized prose passage to subjective interletter similarity, perceived word similarity, and context variables of letter and word frequency and word length. Results indicate that proofing accuracy is related to interletter similarity as mediated by similarity between words and contextual variables.

IV-20 Eye movement studies

RAYNER, KEITH. Eye movements in reading and information processing. *Psychological Bulletin,* May 1978, *85,* 618-660.

Reviews studies of eye movements in reading and other information-processing tasks such as picture viewing, visual search, and problem-solving. The major emphasis of the review is on reading as a specific example of the more general phenomenon of congition processing.

MCCONKIE, GEORGE W. The use of eye-movement data in determining the perceptual span in reading. In Richard A. Monty & John W. Senders (Eds.) *Eye movements and psychological processes.* Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1976. 429-441, & 453-455.

Suggests some innovative techniques for studying eye movement processes during reading and describes two investigations in which some of the new methods were used.

KOLERS, PAUL A. Buswell's Discoveries. In Richard A. Monty & John W. Senders (Eds.) *Eye movements and psychological processes.* Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1976. 373-395, & 453-455.

Considers some of Buswell's work on eye movements and reading. Relates Buswell's findings to current interests.

HOCHBERG, JULIAN. Toward a speech-plan eye-movement model of reading. In Richard A. Monty & John W. Senders (Eds.) *Eye movements and psychological processes.* Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1976. 397-416, & 453-455.

Discusses a cognitive model of reading and reports some experiments that support the model.

COHEN, KAREN M. Eye activity in the study of the reading process. In Karen M. Cohen, Richard F. West, & George Marsh (Eds.) *Models of* *efficient reading.* Newark, Delaware: International Reading Association, 1978. 1-27.

Summarizes some data on eye activity and reading and presents some directions for future research in this area.

McConkie, George W. Stimulus control in the study of reading. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978. 206-211.

Describes a research approach for studying reading at the micro-level. Gives examples of studies using this approach.

Wanat, Stanley F. Language behind the eye: some findings, speculations, and research strategies. In Richard A. Monty & John W. Senders (Eds.) *Eye movements and psychological processes,* Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1976. 523-529 & 531-534.

Discusses research pertinent to influence of written language structure upon selective visual attention of readers as monitored through the eye movements of twelve mature readers on eighty test sentences. Sentences were paired by linguistic function, i.e., subject-modifying form or object-modifying form. Oral and silent reading modes were observed. Among the findings, oral reading required significantly more attention than silent reading, readers selectively allocated their attention to different areas of the sentence, and structurally less predictable sentences required more visual attention.

Fisher, Dennis F. Spatial factors in reading and search: the case for space. In Richard A. Monty & John W. Senders (Eds.) *Eye movements and psychologial processes.* Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1976. 417-427, & 453-455.

Describes data which support the belief that two processes called peripheral search guidance and cognitive search guidance are active during reading.

McConkie, George W., & Zola, David. Is visual information integrated across successive fixations in reading? *Perception and Psychophysics,* March 1979, *25,* 221-224.

Researches the eye movement performance of eight college students in reading two 350-word passages of alternating case with letter case shifts occurring in certain saccades. Passage understanding was tested with five comprehension questions. Passages were presented on a computer controlled cathode ray tube. No evidence was discerned that changing visual shape of letters exerted a disruptive effect upon reading.

Haber, Ralph Norman. Control of eye movements during reading. In Richard A. Monty & John W. Senders (Eds.) *Eye movements and psychological processes.* Hillsdale, New Jersey: Lawrence Erlbaum

Associates, 1976. 443-451, & 453-455.

Explains three models of eye movement processes during reading and refers to research that can be related to each of the models.

IV-21 Studies on the reading process

MASSARO, DOMINIC W. A stage model of reading and listening. *Visible Language,* Winter 1978, *12,* 3-26.

Presents a model of reading and listening that has a storage component to describe the nature of the information at a particular stage of processing and a functional component to describe the operations of a stage of processing. Data and theory from a variety of studies of language processing were incorporated.

ROSENBLATT, LOUISE M. *The reader, the text, the poem: the transactional theory of the literary work.* Carbondale and Edwardsville, Illinois: Southern Illinois University Press, 1978.

Draws upon the author's background in philosophy, anthropology, psychology, linguistics, and forty years of observing student involvement with a wide range of literary texts, to elaborate upon a "transactional" view of reading, particularly the reading of literature. Rosenblatt differentiates between "efferent" or nonaesthetic reading, which focuses upon the informational product, and aesthetic reading, which is concerned with what happens to the reader during the actual reading event. Albeit a heuristic discourse, this transactional construct of reading provides a middle ground alternative to models and research paradigms which focus, by reduction and in isolation upon *either* "text" analysis *or* reader dynamics.

HOLLAND, NORMAN N. A transactive account of transactive criticism. *Poetics,* June 1978, *7,* 177-189.

Describes the genesis and underpinnings of a new approach to literary criticism: the transactive criticism. The author originally postulated that a theory of literature (and therefore reading) should take into account responses to texts as well as texts themselves, and for a theory of the literary interaction between author and readers, the difference in response to the same text is as significant as the sameness of the text. Over a period of several years, the author attempted to test the theory by interviewing college students and administering projective psychological tests. Additional postulates of the theory included that the diversity in responses to texts could not be attributed to the text alone, nor to the shared interpretive methods and critical values of respondents. The author includes additional theoretical postulates, as well as a discussion of the four basic principles of transactive criticism.

CUNNINGHAM, PATRICIA M., & CUNNINGHAM, JAMES W. Investigating the "print to meaning" hypothesis. In P. David pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-*

seventh Yearbook of the National Reading Conference, 1978. 116-120.

Analyzes the processes of silent reading as sound-symbol correspondences function in an intermediary role with forty-seven fifth and sixth graders and fourteen graduate students. A reading task was designed in which using sound as an intermediary between print and meaing was precluded. One group of fluent readers was randomly assigned to this task. Another group was assigned to a task differing only in the fact that using sound was possible. The two groups were then compared on their trials to criterion in learning the lexicon of the passage, rate of reading, and recall of material read. The number of trials to criterion was greater for the unpronounceable group; however, this difference was not significant. Subjects in the pronounceable group read the passage in significantly less time than subjects in the unpronounceable group. The results of the investigation did not support the hypothesis that readers proceed directly from print to meaning. A third alternative to the print-to-meaning/print-to-sound-to-meaning controversy posited was print-to-meaning-to-sound-to-memory.

WRIGHT, PATRICIA. Feeding the information eaters: suggestions for integrating pure and applied research on language comprehension. *Instructional Science,* July 1978, *7,* 249-312.

Examines the current relation between pure and applied research on the comprehension of written information. Suggests that greater interaction between the two could be profitable.

POTTS, GEORGE R. The role of inference in memory for real and artificial information. In Russel Revlin & Richard E. Mayer (Eds.) *Human Reasoning.* New York: John Wiley & Sons, 1978. 139-161.

Describes some basic results of studies of semantic memory and experiments using artificial information. A theoretical position is then described which accounts for these results. Finally, some preliminary experiments designed to test the theoretical position are described.

MONTEITH, MARY K. Schemata: an approach to understanding reading comprehension. *Journal of Reading,* January 1979, *22,* 368-371.

Reviews several of the reports in the ERIC data base which explore the application of schemata theory to the understanding of the reading process.

WEST, RICHARD F. Efficient processing activities in reading. In Karen M. Cohen, Richard F. West, & George Marsh (Eds.) *Models of efficient reading.* Newark, Delaware: International Reading Association, 1978. 28-61.

Discusses the notion of processing efficiency in reading; reviews a model of reading that deals explicitly with automatic information processing, and presents a methodologically oriented discussion of relevant research.

MARSH, GEORGE. The HIP approach to reading. In Karen M. Cohen, Richard F. West, & George Marsh (Eds.) *Models of efficient reading.* Newark, Delaware: International Reading Association, 1978. 62-70.

Critically reviews the human information processing approach to reading. Assesses its utility both as a theory of how people read and as a possible guide to pedagogical practice.

FARNHAM-DIGGORY, SYLVIA. How to study reading: some information processing ways. In Frank B. Murrary & John J. Pikulski (Eds.) *The acquisition of reading: cognitive, linguistic, and perceptual prerequisites.* Baltimore: University Park Press, 1978. 61-89.

Presents some information processing methods for studying reading. Includes research that exemplifies various methods.

GUTHRIE, JOHN T. Critique: information processing: a model or myth? In Frank B. Murrary & John J. Pikulski (Eds.) *The acquisition of reading: cognitive, linguistic, and perceptual prerequisites.* Baltimore: University Park Press, 1978. 91-98.

Reacts to a presentation of information processing methods of studying reading. Includes relevant research.

STICHT, THOMAS G. The acquisition of literacy by children and adults. In Frank B. Murrary & John J. Pikulski (Eds.) *The acquisition of reading: cognitive, linguistic, and perceptual prerequisites.* Baltimore: University Park Press, 1978. 131-162.

Presents research related to a model of the development of literacy skills. Evidence for the model's general validity is presented.

MARTIN, MARYANNE. Top-down processing and target search in reading. *Perceptual and Motor Skills,* April 1979, *48,* 467-470.

Reviews evidence concerning the detection of different types of written target. Concludes that the assumption that processing is top-down during reading provides a satisfactory quantitative account of available data.

SALOMON, GAVRIEL. Media and symbol systems as related to cognition and learning. *Journal of Educational Psychology,* April 1979, *71,* 131-148.

Criticizes the research on media and suggests that it fails to deal with media's most essential characteristic, symbol systems. Alludes to some reading research.

HANNA, GERALD S., & OASTER, THOMAS R. Toward a unified theory of context dependence. *Reading Research Quarterly,* 1978-79, *14*(2), 226-243.

Presents a general theory of context dependence. Includes a review of the literature on passage dependence.

VENEZKY, RICHARD L. Reading Acquisition: the occult and the obscure. In Frank B. Murray & John J. Pikulski (Eds.) *The acquisition of reading: cognitive, linguistic, and perceptual prerequisites*. Baltimore: University Park Press, 1978. 1-22.

Reviews the literature on common reading methods, grapheme/phoneme correspondences, the management and organization of the schools, and basic pyschological research on prereading competence.

MARTINDALE, COLIN. Preface: psychological contributions to poetics. *Poetics*, June 1978, *7*, 121-131.

Reviews studies and theories concerned with psychological processes that are involved in the production of, and the response to, works of art. Focuses on work that has the most potential relevance to poetics.

V. The teaching of reading

V-1 Status of reading instruction

AARON, IRA E. Today's reading achievement—with suggestions for improving tomorrow's performance. *Journal of Research and Development in Education*, Spring 1978, *11*, 3-11.

Attempts to answer questions about the current status of reading achievement in the United States. Reviews national studies on this topic and presents some actions that might be considered for improving reading achievement, regardless of what the levels of achievement may be.

FOX, BARBARA J., & BEEZER, BRUCE G. State mandated assessment: what's happening in reading? *Journal of Reading*, October 1978, *22*, 33-39.

Reports results of a survey to determine the status of state mandated assessment programs in reading. The survey revealed that twenty states had some type of mandatory assessment in reading functioning as a result of either legislative or state board of education action. Fourteen of the states had adopted such a policy since 1970. The predominant purpose of the assessment program was identified by fourteen states as being program evaluation; four states replied that the purpose was evaluation of individual student abilities; another three states combined the two functions. Sixteen of the states reported using tests whose content was specially selected at the state level. Of these, ten reported using only tests designed at the state level, while six reported utilizing a combination of commercial and state-designed tests. Annual testing was reported by sixteen states. All mandating states except one reported testing at both intermediate and high school levels; only nine reported testing in grade 3 and below.

GRIFFIN, PEG. How and when does reading occur in the classroom? *Theory Into Practice,* December 1977, *16,* 376-383.

Cites data based on video and audio records and ethnographic reports on the reading behavior occurring throughout the day in one first grade classroom with twenty children. First, using the video and audio records, all events noticed as reading were identified—the "etic" level. Second, an "emic" level analysis was conducted in which the "etic" events are grouped. The "emic" level was used to describe what was meaningful to the teacher and the pupils about reading events. The author found reading occurring all day long in a number of situations. Materials read included primers, trade books, resource books, menus, daily schedules, recipes, labels from experiments, and each other's work. Examples of specific reading occurrences outside of the official reading time was cited. The author focused on the use of reading as a tool and suggested implications for reading theory and instruction.

TAIWO, OLADELE. The problems of beginning and developmental reading in Nigerian primary schools. In Dina Feitelson (Ed.) *Mother Tongue or Second Language?* Newark, Delaware: International Reading Association, 1979. 90-96.

Pilots a research project to identify the problems of beginning and developmental reading in the primary schools of Nigeria. A two-part questionnaire was distributed to thirty selected schools in one state. Information was requested relative to special reading programs and the problems of teaching reading. Six of the thirty schools had special reading programs; of these four were headed by trained teachers. In the other schools, reading was taught through the general English program. Problems identified by teachers included unhelpful home background, poor home-school relationships, poor preparation of reading teachers, insufficient books, and a lack of reading centers and clinics. Recommendations for improvement are made.

PUGH, A. K. Silent Reading: an introduction to its study and teaching. London: Heinemann Educational Books, 1978.

Stresses the need for a progressive build-up of reading skills throughout formal education and beyond. Includes an historical perspective of silent reading and reviews recent approaches to beginning silent reading and speed reading courses. Other issues related to silent reading are also addressed.

V-2 Comparative studies

FARR, ROGER; FAY, LEO; & NEGLEY, HAROLD H. *Then and now: reading achievement in Indiana (1944-45 and 1976).* Bloomington, Indiana: Indiana University, 1978.

Presents data on an extensive study comparing the reading achievement scores of Indiana sixth and tenth graders in 1944-45 with those in 1976. Both samples were tested using the same edition of the *Iowa Silent Reading Tests.* Subjects in the 1944-45 testing numbered over 15,000 grade 6 pupils and over 11,000 grade 10 students. The 1976 study included a 7 percent, stratified sample of over 8,000 grade 6 and 8,000 grade 10 students in Indiana schools. In addition to total test score comparisons, comparisons of specific subskill scores were made, and societal and educational survey data were also collected. Grade 6 pupils in 1976 scored about the same as those in the earlier sample, but the 1944-45 sample were about 10 months older than their 1976 counterparts. With the age differential considered, the 1976 sixth graders outscored the 1944-45 group on every subskill assessed as well as on Total Median Score. The 1944-45 grade 10 students were 14 months older than the 1976 group. When age equivalent comparisons were made, results favored the 1976 group. Thus, the authors conclude that the reading skills achievement of today's children appears to be higher than that of children from years past.

FARR, ROGER, & TONE, BRUCE. What does research show? *Today's Education,* November-December 1978, *67,* 33-36.

Asserts that reading education today is not less effective now than in the past. Supporting research is cited.

FARR, ROGER. Reading: the good news and the challenges. *The California Reader,* April 1979, *1,* 23-28.

Claims that children are learning to read as well or better today than they did thirty years ago. Cites research on trends in reading achievement.

FARR, ROGER, & BLOMENBERG, PAULA. Contrary to popular opinion ...children today are exhibiting better reading skills than their predecessors. *Early Years,* May 1979, *9,* 52-53, 68.

Presents some evidence that schools are more effective than ever in increasing literacy.

DUBBS, MARY WRAY. How good were readers in the good old days? Replication of two studies. *The Reading Teacher,* May 1979, *32,* 933-939.

Represents an effort to compare reading achievement of students today with results reported in two previous studies. For the present study, 183 grade 6 pupils were given the same comprehension test administered to 200 sixth graders in a 1917 report by Thorndike. Additionally, 583 eighth graders were asked to define five words from an original list of twenty-eight given in 1845 to eighth graders. The five words had been administered to 12,000 grade 8 students in 1919. Grade 8 students in 1978 scored somewhat lower on the five definitions than did the 1919 group, but the difference was not statistically significant. Grade 6 pupils showed significantly higher scores than did their 1917 counterparts. Another group of 165 eighth graders and 349 sixth graders, all from another state, showed essentially similar results.

ADENIRAN, A., & UNOH, S. O. A comparative study of reading achievement in English and Yoruba. *West African Journal of Education,* October 1975, *19*, 391-401.

Compares reading achievement in English and Yoruban textual materials among twenty-nine university students who were native speakers of Yoruba. Subjects read two prose passages and responded to ten multiple choice questions following each passage. Their reading was timed and their comprehension scores computed. From these scores, each testee's reading efficiency index in the two languages was derived. Twenty subjects read the English passages faster than they read the passages in their native languages. However, twenty-seven subjects scored higher in comprehension on the Yoruba passage than on the English passage.

CASSIDY, JACK. Good news about American education. *The Reading Teacher*, December 1978, *32*, 294-296.

Responds to critics of American schooling by presenting results of several studies which indicate that schools are effective and youngsters can read.

HUSÉN, TORSTEN. Evaluation Reflections: policy implications of the IEA findings and some of their repercussions on national debates on educational policy. *Studies in Educational Evaluation*, Summer 1977, *3*, 129-141.

Deals with the IEA findings that have a bearing on educational policy at a general level. Includes findings about reading.

TRAVERS, MICHAEL. A second replication of a survey of reading comprehension in Dublin city schools. *The Irish Journal of Education*, Summer/Winter 1976, *10*, (1 & 2), 18-22.

Reports the results of the third in a series of surveys of the reading attainment of 11-year-old pupils in Dublin schools (1964, 1969, and 1974). A total of 1,321 pupils from 211 schools were administered the *NS6 Reading Attainment Test*, designed and standardized by the National Foundation for Educational Research in England and Wales, which consists of sixty incomplete sentences of multiple choice response form. Contrary to the 1964-1969 comparison, the 1974 survey revealed improved score differences at the .01 level of significance. Mean score for boys of 107 was not significantly higher than that of 106 for girls. Significant differences also were found in favor of larger sized schools.

V-3 Early reading

DURKIN, DOLORES. Pre-first grade starts in reading: where do we stand? *Educational Leadership*, December 1978, *36*, 174-177.

Contends that reading instruction can begin in kindergarten providing the conditions are appropriate. An historical perspective on pre-first grade reading is sketched and some research is cited.

Lesiak, Judi. Reading in kindergarten: what the research doesn't tell us. *The Reading Teacher,* November 1978, *32,* 135-138.

Reviews research on early readers to show that many questions about early instruction remain unanswered.

Teale, William H. Positive environments for learning to read: what studies of early readers tell us. *Language Arts,* November/December 1978, *55,* 922-932.

Attempts to specify factors that are indicative of a positive environment for learning to read.

V-4 Reading readiness

Nurss, Joanne R. Research on the assessment of prereading skills—an American perspective. *Reading,* April 1979, *13,* 21-29.

Summarizes some American research on the assessment of prereading skills.

Carducci-Bolchazy, Marie. A survey of the use of reading readiness tests. *Reading Horizons,* Spring 1978, *18,* 209-212.

Conducts a survey to determine how extensively and for what purposes readiness tests are being used. An author-developed survey form was sent to a stratified random sample of fifteen school districts from ten New York counties. A 100 percent return was reported. Of the districts involved, five districts used four tests, three districts used three tests, one district used two tests, and four districts used one test. The most frequently used tests were the *Metropolitan Readiness Test* and the *Gates-MacGinitie Readiness Tests.* Respondents in eight of the thirteen districts used tests to establish a cut-off point for reading instruction. Six of these eight districts used the subtests for diagnosing specific skill weaknesses.

Gabbard, Carl. Visual-motor training and performance on a fine motor task by kindergarten children. *Perceptual and Motor Skills,* December 1978, *47,* 950.

Assign 104 kindergarten children randomly to one of two treatment groups and assesses the effect on reading readiness. Group 1 was given eye-hand coordination activities three days a week for 30-minute periods over ten weeks. Group 2 served as a control group and engaged in free-play activities. Pre- and post-measures were taken on the copying section of the *Metropolitan Readiness Test.* In addition, each subject copied his name and the name of the school. All test evaluation was done on a subjective basis. A significant increase was found for the pre- to posttest performance for the experimental group but not for the controls.

Burke, Jacob; Lewy, Rafael; Williams, John D.; Brekke, Beverly; Harlow, Steven D.; & Peterson, Wayne. The effects of three experimental programs on reading readiness. *Journal of Learning Disabilities,* October 1978, *11,* 515-518.

Tests the efficacy of three different programs on reading readiness. The 106 kindergarten pupils involved came from six classes in three elementary schools. Subjects were individually administered the following tests at the beginning of the year: *Richman-Rosner Perceptual Survey,* Getman Sized *Block Discrimination Test, Slosson Intelligence Test* (SIT), and *Goodenough Draw-A-Man.* At the end of the school year, the Richman-Rosner and Getman tests were again administered along with the *Gates-MacGinitie Reading Test: Readiness Skills.* The three programs included a language experience approach; a basal approach with large and small group activities and project centers; and a program emphasizing visual, motor, and tactile skills. Data analysis was conducted via an analysis of covariance using pretest SIT and Draw-A-Man scores as covariates. The different programs showed varying effectiveness with the various subtests on the readiness test. The language experience approach was more effective with the following directions, letter recognition, and auditory blending subtests. The basal approach was more effective with the listening comprehension and the auditory subtests. Children using the visual-motor-tactile program scored better on the visual-motor subtest of the readiness test; however, this group did not perform better on the Richman-Rosner or the Getman.

QUORN, KERRY CHARLES, & YORE, LARRY DEAN. Comparison studies of reading readiness skills acquisition by different methods: formal reading readiness program, informal reading readiness program, and a kindergarten science program. *Science Education,* October/December 1978, *62,* 459-465.

Proposes in two experiments to assess the effectiveness of various programs on the acquisition of reading readiness skills in kindergarten. In the first experiment, the programs investigated were *Science: A Process Approach, Part A* (SAPA) and *The First Talking Alphabet* (FTA). The fifty-one pupils involved were randomly assigned to morning and afternoon treatment groups. Each treatment group received twenty-two half hour periods of instruction over a period of ten weeks in addition to the regular informal program. Pre- and posttest scores on the *Metropolitan Readiness Test* and the *Clymer-Barrett Prereading Battery* were analyzed using a 3-way analysis of variance with treatment, sex, and attendance time as the main dimensions. Pre- and posttest mean gain scores were also analyzed. Both programs produced similar kinds of achievement, both sexes benefitted from instruction, and neither program showed a specific differential effect for a given sex group. In the second experiment, four programs were compared: SAPA, FTA, an informal language development program, and a control. Readiness skills were assessed by the Wepman *Auditory Discrimination Test,* the Moe *Beginning Consonant Sound Symbol Relationship Test,* and the *Clymer-Barrett Prereading Battery.* The four treatments and the fifty-four subjects were again randomly assigned. No significant treatment differences or interaction effects were noted.

Ogletree, Earl J. Evaluating the reading needs of inner-city kindergarten pupils. *Journal of Educational Research,* November/December 1977, *71,* 67-70.

Compares the effectiveness of the Distar and an eclectic readiness program with innercity kindergarten children. Subjects were randomly selected for each program with an N of 64 in the Distar group and 191 in the eclectic program. The Distar group included five classes of twelve to fifteen pupils each with one or two aides assigned to each class, plus additional auxiliary services; the eclectic sample included seven classes of twenty-five to thirty pupils each, with no aides or special services. At the end of the kindergarten year, children were given the Test of Basic Experience, L level, in language and mathematics. Children in the eclectic group obtained significantly higher mean language and mathematics readiness scores than did children in the Distar group.

Braggett, E. J. The effect of preschool kindergarten attendance on language and school achievement: a review of research. *The Australian Journal of Education,* June 1977, *21,* 150-166.

Examines the literature on the effects of preschool attendance on language and school achievement. Includes research on reading.

Dollinger, Roberta A., & Walker, David N. The effect of three methods of presentation and socioeconomic class on recognition performance in the presentation of low frequency words to kindergarteners. *Journal of Reading Behavior,* Fall 1978, *10,* 303-305.

Explores the effectiveness of three methods of teaching eight low-frequency words to kindergarten children. Subjects were seventy-two lower class and seventy-two upper middle class children randomly assigned to one of three methods: Word, Word Picture, or Word Object. Words were presented in random order, and each subject received twenty alternating learning trials and acquisition trials. Retention was assessed one day later and one week later. No sex differences were noted in retention. Children in the Word method group scored highest on both retention tests. Upper socioeconomic children scored better than lower socioeconomic children.

Klein, Ann E. Parent involvement in children's reading readiness development. *Reading Horizons,* Summer 1978, *18,* 273-276.

Presents some research on parent education programs and parents' role in their children's progress in learning to read.

Speidel, Gisela E. Forward and backward associations in learning letter sounds. *Psychological Reports,* August 1978, *43,* 159-164.

Investigates the effects of teaching letter-sound correspondences in different ways with twenty preschool children. The children in one group were presented with the letter symbol and asked to produce the sound, while the other group was presented with the letter sound and asked to point to the corresponding letter symbol in an array of letters. After the last acquisition trial, the children were given a reversal trial in which they were presented with the usual response and asked to produce the stimulus. Performance of both groups on the reversal trial was significantly lower than on the last acquisition trial.

V-5 Teaching reading—primary grades

MOERS, FRAN, & HARRIS, JERRY. Instruction in basic concepts and first grade achievement. *Psychology in the Schools,* January 1978, *15,* 84-86.

Designs an instructional program for sixty-six grade one pupils who fell below the 40th percentile (local norms) on the *Boehm Test of Basic Concepts* (BTBC) and notes improvement on the BTBC and the transfer to reading skills. Complete data were reported for fifty-four pupils who were randomly assigned to an experimental, control, or placebo group. Instruction occurred in two 20-minute sessions per week over a 15-week period. The BTBC was administered again at midyear and in the last month of the school year. In addition, Primary I Battery of the *Stanford Achievement Test* (SAT) was given at the end of grade one. All three groups increased their scores on the BTBC from pre- to posttest to delayed posttest. However, no significant differences among groups were found. There were differences favoring the experimental group on the SAT Spelling, Word Meaning, Word Study Skills, and Paragraph Meaning subtest scores.

CHESTERFIELD, RAY. Effects of environmentally specific materials on reading in Brazilian rural primary schools. *The Reading Teacher,* December 1978, *32,* 312-315.

Considers the effects of using materials depicting the local environment in teaching reading to rural grade one pupils in Brazil. A final sample of ninety-eight children from eight classrooms in eight different rural schools, four experimental and four control, was utilized. In the experimental classes, reading materials were constructed containing words and pictures appropriate to the rural locale but with structural situations equivalent to the basic text used in the control classes. The experimental text involved sixty-eight word changes and fifty picture changes. All teachers were first year teachers unfamiliar with the materials. The first grade final examination was given as a pre- and posttest measure. The experimental group scored significantly higher than the control group. In a writing situation, experimentals used significantly more words and greater description.

HILL, CHARLES H. Drill versus discovery: the effects on student attitudes. *Reading Horizons,* Fall 1978, *19,* 61-70.

Assesses cognitive and affective outcomes of imposing a highly structured, repetitive, teacher-oriented routine for teaching decoding and comprehension upon a basal reading program. Three classroom teachers participated in the program and included first, fifth, and sixth grades with a total population of 138 children. Subjects were randomly divided into an experimental and a control group. Both received about sixty hours of instruction. Experimentals followed the *Ethna Reid Reading Program.*

Alternate forms of the *Woodcock Reading Mastery Tests* were given for pre- and posttest assessments of reading skill and a 20-item semantic differential scale was also administered as a pre- and posttest measure of attitude. No significant differences between groups were noted for reading skills. Only first grade children showed an increased positive attitude toward non-reading questions and a more negative attitude toward reading. The author concluded that the addition of the repetitive and structured drill neither helped nor hindered reading achievement, nor did it seem to affect attitude toward reading.

Merricks, Anne R., & Crocker, Robert K. The influence of science process activities and selected science reading materials on reading achievement of first and third grade pupils. *School Science and Mathematics,* December 1978, *78,* 684-690.

Tests the hypothesis that exposure to science process activities and science-related supplemental reading materials can increase reading achievement test scores. Subjects were grade 1 and 3 pupils from sixteen classrooms in Newfoundland. Two classes in each grade were assigned to each of four treatment groups: I) Science process curriculum with supplementary science reading materials; II) Science process curriculum; III) Supplementary science reading materials; IV) Control. The experiment was conducted over a 5-month period. The *Gates-MacGinitie Reading Test* was given as a pre- and posttest measure. On the comprehension subtest, at grade 1, treatment I yielded significantly higher mean scores. Treatments II and III were superior to the control but not significantly different from each other. At grade 3, treatments II and III yielded significantly higher means than either treatment I or controls for comprehension. No differences were noted for vocabulary at either grade level.

Henry, John A. Elementary school science experiences and reading achievement in six-year-old children. *Genetic Psychology Monographs,* November 1978, *98,* 159-179.

Presents findings of a study done to investigate the relationship between science experiences and reading achievement for grade 1 children. Complete data were collected on 104 children in four classrooms in two Australian elementary schools. Classes were matched for teacher sex, age, and competence; class size, composition, and mean age; school size, type, and educational program. In each school, one class was randomly assigned to the control and one to the experimental program. The experimental classrooms included a special science program of discrimination and classification activities over a 15-week period. Assessment devices included a group intelligence measure, the Concept Assessment Kit-Conservation, and the *Australian Council for Educational Research Primary Reading Survey Tests,* AA Level Word Recognition. All tests were given prior to the experimental period; the conservation attainment and reading tests were given again as posttest measures. The analysis showed a significant treatment effect for conservation attainment and reading achievement. The author concluded that the science program was instrumental in increasing reading achievement.

Scott, Ralph. Home start: third-grade follow-up assessment of a family-centered preschool enrichment program. *Psychology in the Schools,* October 1976, *13,* 435-438.

Evaluates the grade three achievement test scores of children who had participated in the Vertical Home Start (VHS) program during their preschool years. A total of thirty-one (twenty-two Black and nine White) VHS subjects and their non-Home Start siblings were located for the comparison followup. Subjects were given the *Iowa Tests of Basic Skills* (ITBS) and grade equivalence scores used for comparisons. No significant differences were obtained for White children. However, Black VHS children obtained higher rankings on eleven of the fifteen ITBS subtest measures. Vocabulary and Reading subtest scores did not reach significance for Blacks or Whites.

Haddock, Maryann. Teaching blending in beginning reading instruction *is* important. *The Reading Teacher,* March 1978, *31,* 654-658.

Examines the effectiveness of training in teaching the segmentation-blending skill and the intrusive vowel phenomenon with children from five kindergarten and first grade classrooms. A test of synthetic words was constructed from a basic set of seven sound-letter correspondences and administered as a pretest; only children who could not pronounce the synthetic words were included in the study. Blending training took three forms: an auditory method where teachers pronounced training words in parts; an auditory-visual method where teachers used manipulatives to point out how sounds and letters can be substituted for one another in making new words; basic sound-symbol correspondence training. The training period was ten minutes per day for three weeks. Results indicated that children taught to blend by the auditory-visual method blended significantly more synthetic words than those in the control group, but that children taught to blend with an auditory method did not blend more than those in the control group.

Williams, Fern & Oakland, Thomas. A three-year auditory perception program for low-SES minority children. *The Journal of Special Education,* Fall 1978, *12,* 331-344.

Evaluates the effectiveness of three instructional approaches in promoting speech sound discrimination and reading achievement over a 3-year period. Subjects were forty-eight Black and Mexican-American grade 1 children identified as having auditory discrimination disabilities on the basis of scores on two subtests of the *Clymer-Barrett Prereading Battery.* Subjects were assigned randomly to one of three groups: visual-linguistic plus auditory (VLA), visual-linguistic (VL), and phonics (P). By the end of grade 3, thirty-four of the original group remained. Additional test data included the reading sections of the *Metropolitan Achievement Test* and the *California Achievement Test,* the *Gilmore Oral Reading Test,* and two criterion-referenced tests developed for the study. No significant differences were found among the three groups on any administration of the reading tests.

Williams, John D., & Brekke, Beverly W. Effect of a visual motor program on school achievement: a longitudinal study. *Perceptual and Motor Skills,* December 1977, *45,* 786.

Assesses the relationship effect of visual-motor training upon achievement in the primary grades as measured by the *Gates-MacGinitie Primary Reading Test* and the *Iowa Test of Basic Skills* (ITBS). Subjects consisted of sixty average ability pupils from middle class homes. Six classes from three schools represented comparative approaches of 1) visual-motor training supplementing basal-language experience activities, 2) language experience in learning clusters, and 3) traditional informal readiness plus basal. No significant differences were observed at first and second grade levels. In third grade testing (ITBS), the visual-motor group performed significantly lower than the traditional instructional group.

Downing, John. The probability of reading failure in i.t.a. and t.o. *Reading* (UKRA), December 1977, *11,* 3-12.

Recounts data from some previous studies on i.t.a. and urges that i.t.a. be used. Also refers to the Bullock Report.

Brinkman, Erwin H., & Sutton, Ruth H. The initial teaching alphabet as a teaching strategy with moderately handicapped young children. *Reading Improvement,* Fall 1978, *15,* 236-240.

Addresses itself to the long range effects of i.t.a. with children identified at the prereading level as potential problem readers in grade one. The thirty children involved in the study were followed through grade 3. Half had been instructed by t.o. and half by i.t.a. Subjects were matched on the basis of three pretest scores given in kindergarten. All subjects participated in a special reading program for high risk pupils in grade one emphasizing auditory and visual training. Kindergarten tests included the Word Meaning, Draw—A-Person, and Letter Matching subtests of the *Metropolitan Readiness Test;* the Following Directions, Sound Discrimination, and Blending subtests of the *Gates-MacGinitie Test,* the Reading and Arithmetic sections of the *Wide Range Achievement Test,* the *Beery Test of Visual-Motor Integration,* and the Auditory Memory subtest of the *Illinois Test of Psycholinguistics* (ITPA). In grade 3, all subjects were given the *Wide Range Achievement Test* (WRAT) and the *Diagnostic Reading Scales.* Scores on auditory memory as assessed by the ITPA were found to have a statistically significant bearing on reading achievement. No significant differences were found between groups on the posttest measures although mean performance scores on reading rate and comprehension were lower for the i.t.a. group.

Popp, Helen M. Selecting initial reading instruction for high risk children: a theoretical approach. *Bulletin of the Orton Society,* 1978, *28,* 15-42.

Develops a scheme for making instructional decisions. Includes a review of research on dyslexic children that is directed towards identifying common deficits.

Calfee, Robert C., & Drum, Priscilla A. Learning to read: theory, research, and practice. *Curriculum Inquiry,* Fall 1978, *8,* 183-249.

Sketches some ideas about how reading theory, research, and instruction fit together. Selected research is reviewed.

Pearson, P. David. On bridging gaps and spanning chasms. *Curriculum Inquiry,* Winter 1978, *8,* 353-363.

Reacts to a previous reading research review that attempted to clarify relationships between theory, research, and practice.

Chall, Jeanne S. Reading research—for whom? *Curriculum Inquiry,* Spring 1979, *9,* 37-43.

Reacts to a prior review of research on learning to read.

Richek, Margaret A. "Spiteful tracts compete against bloodless surveys:" the use of reading research. *Curriculum Inquiry,* Spring 1979, *9,* 45-57.

Responds to a prior review of research on learning to read.

Lotto, Linda S. What research says about beginning reading. In Harold G. Shane & James Walden (Coordinators) *Classroom-relevant research in the language arts.* Washington, D.C.: Association for Supervision and Curriculum Development, 1978. 61-72.

Analyzes and synthesizes research and related writing on beginning reading from 1970 to 1976.

Elkind, David. Beginning reading: a stage-structure analysis. *Childhood Education,* February/March 1979, *55,* 248-252.

Details a stage-structure analysis of reading applicable to any method of teaching reading. Empirical evidence is discussed.

Groff, Patrick. A critique of teaching reading as a whole-task venture. *The Reading Teacher,* March 1979, *32,* 647-652.

Questions assertions made by a proponent of an "assisted reading" method, citing some research.

Hoskisson, Kenneth. A response to "A critique of teaching reading as a whole-task venture." *The Reading Teacher,* March 1979, *32,* 653-659.

Responds to criticisms of "assisted reading" and reviews a theory that supports the technique.

V-6 Teaching reading—grades 4 to 8

Maring, Gerald H. Maturity in reading for seventh graders. *Journal of Reading,* January 1979, *22,* 325-331.

Posits a procedure for delineating and assessing the reading maturity level of grade 7 pupils and presents findings. The 899 seventh graders enrolled in thirty-three English classes were given a battery of attitude and interest measures, *The Reading Inventory,* in September. In November, subjects were given part of the inventory again and scores on the *Nelson Reading Test* were collected from school records. The nine English teachers involved classified 448 pupils in their classes who were most, more, less, or least mature in reading. Scores of subjects on the various instruments were analyzed by stepwise discriminant function procedures. The following measures were identified as significant measures of grade 7 maturity in reading: skill in reading (*Nelson Reading Test* scores), leisure book reading time, Wednesday reading time, breadth of leisure reading, and attitude toward leisure book reading. These variables accounted for 84 percent of the correspondence between pupil scores and teacher nominations of most and least mature readers and 70 percent of the correspondence between pupil scores and teacher nominations of more and less mature readers. Maturity in reading profiles are presented for seven subjects.

WOLF, ANNE E., & MIKULECKY, LARRY. Effects of uninterrupted sustained silent reading and of reading skills instruction on changes in secondary students' reading attitudes and achievement. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978. 226-228.

Studies the effects of two treatments, Skills Instruction Alone (SIA) and Skills Instruction plus Uninterrupted Sustained Silent Reading (USSR) on the reading achievement and reading attitudes of 125 grade 7 pupils enrolled in a 9-week developmental reading class. The SIA pupils were given five 40-minute reading instructional periods per week on such skills as context clues, main idea, and word structure. The USSR group received four 40-minute periods per week on the same skills plus one 40-minute period for self-selected reading. Pre- and posttest assessments were taken on the vocabulary and reading subtests of the *Stanford Diagnostic Reading Test,* Level II, the *Mikulecky Behavioral Reading Attitude Scale* and the *Estes Attitude Scale.* Analysis of covariance showed no significant differences between the two treatment groups on vocabulary. A significantly smaller mean score decline was found for comprehension by the USSR group than by the SIA group. No significant differences in attitude were found.

ALMEIDA, EDUARDO. Effects of parental involvement in teacher training. *International Journal of Psychology,* 1978, *13*(3), 221-236.

Views the results of an intervention program for developing academic competence in Mexican school children. Subjects included 378 grade 6 pupils in five schools from four neighborhoods in Mexico City. Subjects were randomly assigned to either the experimental or the control treatment. A course of child development was offered for teachers only in the control condition, and for teachers and parents together in the experimental condition. The intervention program produced positive effects on students in reading and math. Attitudes and behavior of parents and teachers in the experimental program were affected. Other aspects of the program's effect on the community was discussed.

Neville, Mary H., & Pugh, A. K. Reading while listening: the value of teacher involvement. *English Language Teaching,* October 1978, *33,* 45-50.

Studies the effect of reading a text while concurrently listening to a recording of it in various instructional situations and for various types of learners. Subjects were 9- and 10-year-olds from an industrial city in England. One group of 12, group P, contained poorer readers who scored from 8:1 to 8:7 on the *GAP Reading Test.* Group B consisted of twelve better readers who scored from 9:2 to 10:1 on the GAP. Subjects in both groups were matched for sex and reading age with controls. The BBC's *Listening and Reading* materials were used. Half of the subjects in each group were assigned to group X and half to group Y. Training was given two sessions per week for eight weeks in each of two consecutive school terms. Group X received general teacher supervision while group Y received specific teacher supervision. Subjects were retested on the GAP in December and March. All groups showed an increase in GAP scores between the pretest, the interim test, and the posttest. No significant differences were noted between scores for group P and their controls. Group B children scored better than their controls at both interim and posttest times. No significant differences were found between means or variances with teaching groups X and Y.

Kamm, Karlyn. A five-year study of the effects of a skill-centered approach to the teaching of reading. *Journal of Educational Research,* November/December 1978, *72,* 104-112.

Presents the findings of a 5-year study of the effects of implementing a skill-centered approach to the teaching of reading, the Wisconsin Design for Reading Skill Dvelopment, in one school district. The Reading Vocabulary and Reading Comprehension subtests of the *Comprehensive Tests of Basic Skills* (CTBS) were administered in grades 4 and 6 in eighty elementary schools and to grade 8 students in twenty junior high schools. In addition the Using Reference Materials and Using Graphic Materials subtests of the CTBS were given in grades 4 and 6. Results of all pupils in grades K-6 on Word Attack and Study Skills as measured by the Wisconsin Design were also obtained. Comprehension skill attainment on the Wisconsin Design was assessed for all pupils beginning two years after implementation of the program. On the CTBS, the percentage of pupils scoring above the norm improved over the program use period while the percentage of pupils in the first quartile decreased and the percentage of pupils in the fourth quartile increased. On the criterion referenced Wisconsin Design tests, marked improvement was found on most tests over the period from 1974 to 1977.

Hunnes, Frank. The Kelloggsville story: learning management as a means to more effective teaching of reading. *Phi Delta Kappan,* December 1978, *60,* 283-286.

Describes the implementation and evaluation of a learning management program throughout the elementary and junior high schools of one school system. The report covers the first five years of the program's use. The program is termed an individualized system in which the student paces himself. Diagnostic tests determine the level of reading competence and form the basis for an individual course of study. Materials from various publishers are used as children progress through a series of modules each based upon a distinct learning objective. Student work is done in a learning center staffed by two aides. A teacher gives individual instruction as required. Prior to the installation of the program, pupils' scores were 39th from the bottom among the over 500 school districts in Michigan. After the implementation of the program, the grade 7 scores averaged 9 percent above the state average.

Boegli, R. Glen, & Wasik, Barbara H. Use of the token economy system to intervene on a school-wide level. *Psychology in the Schools,* January 1978, *15,* 72-78.

Implements a school-wide token economy system with more than 450 pupils in grades K-6 and evaluates the results. The Individually Guided Education program was used throughout the school. Staff was involved in workshops presenting a behavior modification approach to classroom management. Data were collected on classroom descriptions, disciplinary suspensions, and academic achievement as assessed by the SRA Achievement Test Series. Reading achievement scores on the SRA were obtained in May preceding the study and again in May of the year of the study. The first SRA testing involved all grade 3 pupils and a random selection of pupils in grades 2, 4, 5, and 6. Generally, scores increased about a year in grades 2, 3, and 5; approximately one-half year's increase was found at grade 4 level.

Helfeldt, John P., & Lalik, Rosary. Reciprocal student-teacher questioning. In Clifford Pennock (Ed.) *Reading comprehension at four linguistic levels.* Newark, Delaware: International Reading Association, 1979. 74-79.

Contrasts two question asking techniques for their effectiveness in aiding comprehension. Subjects were twenty-two grade 5 pupils who were assigned to one of two questioning groups based on a stratified random sampling procedure using sex and IQ as variables. Groups were reciprocal student-teacher questioning and unilateral teacher questioning. All subjects received instruction in interpretive reading skills for 45-minute sessions each on fourteen consecutive school days. In the reciprocal question group, a correct response to a teacher's question permitted the pupil to ask a question of the teacher or to choose another pupil to do so. In the unilateral group, emphasis was placed on correct responses which were verbally reinforced. The Interpretation subtest of the *Van Wagenen Analytical Reading Scales* was administered after the 14-day instructional period. The reciprocal student-teacher question group had a significantly higher mean score on the Van Wagenen than did the unilateral teacher questioning group.

Wolf, Ronald E. Using subject-matter areas to raise reading achievement scores. *Reading Improvement,* Winter 1978, *15,* 242-245.

Notes whether junior high school students would score higher on reading and study skills tests if reading and study skills were applied during subject matter instruction. The seventy-four grade 7 pupils were randomly assigned to either an experimental or a control group. Instruction in both groups was conducted by the experimenter in English and social studies five days a week for thirty weeks. In the experimental group, reading and study skills were incorporated into the content area lessons. The skill areas emphasized were locational skills, organizational skills, and reading rate skills. Alternate forms of the Iowa Test of Basic Skills were given as pre- and posttest measures. Experimental group subjects had significantly higher achievement test scores than did control subjects.

Zimmermann, Michael J., & Sassenrath, Julius M. Improvement in arithmetic and reading and discovery learning in mathematics (SEED). *Educational Research Quarterly,* Spring 1978, *3,* 27-33.

Tests the hypothesis that the Special Elementary Education for the Disadvantaged program (SEED) would improve arithmetic and reading test scores. Subjects included 349 experimental pupils in grades 4 to 6 at eleven Title I schools that were participating in the SEED program. Each experimental school was assigned a control Title I school matched on the basis of ethnic composition and Title I ranking. Subjects for control groups were selected at random and subjects in the experimental groups were assigned to classes at random. Groups were pre- and posttested on seven subtests of the *Comprehensive Test of Basic Skills* (CTBS) including Reading Vocabulary, Reading Comprehension, and Reading Total. The program continued for an 8-month period. Findings from a step-wise multiple regression analysis applied to the data indicated that SEED instruction increased all arithmetic scores and the reading vocabulary scores. Sex and age within grade levels and prior SEED experience were found to be insignificant in their effect on math and reading scores. Grade 4 SEED pupils showed gains in all reading areas.

Mavrogenes, Nancy A. The effect of elementary Latin instruction on language arts performance. *Elementary School Journal,* March 1977, *77,* 268-273.

Reviews and reports the results of six programs of Latin instruction in grades 4, 5, and 6 and the effect on reading scores. In the first program, intermediate grade pupils in Philadelphia received 15 to 20 minutes of daily Latin instruction. Vocabulary subtest scores on the *Iowa Tests of Basic Skills* showed that achievement was one year higher for Latin pupils than for matched controls. In Washington, D.C., three public school groups were tested on the *Comprehensive Test of Basic Skills* (CTBS). Groups had one year of Latin instruction, four years of French or Spanish instruction, or no foreign language. Pupils with Latin instruction surpassed the control group and equaled the achievement of the other foreign language groups on the CTBS. In a Massachusetts school, grade 5 and 6 pupils studying Latin showed marked improvement over previous classes on the Vocabulary section of the *Stanford Achievement Test*. Similar findings were reported for innercity grade 6 Indianapolis pupils when results on the Word Knowledge, Reading, Language, Spelling and other subtests of the *Metropolitan Achievement Tests*, were considered. Reports from other cities show positive results for Latin instruction also.

KARAHALIOS, SUE M.; TONJES, MARIAN J.; & TOWNER, JOHN C. Using advance organizers to improve comprehension of a content text. *Journal of Reading*, May 1979, *22*, 706-708.

Employs advance organizers with junior high school pupils and notes the effect on comprehension of a chapter in a science text. The seventy-six grade 7 pupils used as subjects were randomly assigned to one of three treatment groups. Groups differed in the amount and kind of prereading instruction given. Group 1 was instructed to read the chapter and answer the questions at the end; Group 2 was given the same direction and was directed to skim the chapter first and attend to major headings and boldface or italicized vocabulary; Group 3 received the same instructions as the other groups plus an advance organizer explaining the major concepts. At the end of a week, subjects were given a comprehension test covering the text material. A significant difference was found between Groups 1 and 3. No other differences reached statistical significance.

LEGENZA, ALICE. Inquiry training for reading and learning improvement, *Reading Improvement*, Winter 1978, *15*, 309-316.

Notes the results of an inquiry training program on seventh graders' reading and learning skills. The thirty-five subjects were assigned to experimental (N=18) and control (N=17) groups. Controls received reading instruction two days a week and attended a special inquiry training class three days a week. Instruction lasted for thirteen weeks. Subjects were pre- and posttested on the *Gates-MacGinitie Reading Test*, the *Proverbs Test*, and the *Estes Attitude Inventory*. Additional data collected included grade point average and the number and type of questions asked by pupils. Findings showed that the experimental group obtained significantly higher posttest scores than did the control group on four out of five questioning measures, on the Vocabulary subtest of the Gates, and on an Attitude scale.

ARNOLD, MARIE J., & INGRAHAM, MURRAY J. Using ECRI techniques to improve reading skills in social studies. *Reading Horizons*, Winter 1977, *17*, 137-140.

Adapts the instructional methodology employed at the Exemplary Center for Reading Instruction (ECRI) in Salt Lake City to teaching social studies content to sixty-one eighth graders. Basically, the methodology emphasizes the teachers' ability to elicit correct responses from pupils, establishes high mastery levels of responses with performance and rate as criteria, and varies the number of practices needed by individual pupils; effective management and monitoring systems are also utilized. Units in social studies were taught using pre- and posttests, as well as discussion, mastery tests, and maintenance tests. The ECRI principles were built into the instructional units. In order to evaluate the program, pre- and posttest scores for spelling and definitions for each unit were analyzed. Scores on unit mastery tests were compared as a reading comprehension assessment. On most of the comparisons, significant or noticeable gains were shown by the experimental group. The authors felt that gains were shown in such reading process areas as spelling, vocabulary, and content area comprehension.

HANSELL, T. STEVENSON. Stepping up to outlining. *Journal of Reading,* December 1978, *22,* 248-252.

Cites results of an experiment designed to determine if continued exposure to array tasks could develop outlining ability. Arrays are free form outlines requiring students to decide how to arrange key words and phrases to show how an author put them together. A total of seventy-six grade 7 children were randomly assigned to the three experimental and one control class. All groups were given pre- and posttests of outlining scored on the basis of content and format. Average scores for the experimental group increased more than 30 percent after training, while control group scores showed only a 4 percent increase. The difference was statistically significant.

COHEN, RICHARD B., & BRADLEY, ROBERT H. Teaching superordinate concepts with simulation games. *The Alberta Journal of Educational Research,* December 1977, *23,* 298-304.

Investigates the efficacy of teaching superordinate concepts with simulation games and the subsequent effect on improvement in map reading skills among 183 fifth and sixth graders. In the control situation, subjects were taught facts and concepts directly within the context of a lesson on exploration. In the experimental version, subjects actively participated in the lesson by further applying information from the lesson to a simulation task requiring them to use the new information to solve related problems. On the fifth day of the experiment, both groups were administered the map portion of the *Iowa Test of Basic Skills;* two weeks later a delayed posttest was given. Results for both groups were similar on the immediate test; however, the experimental group outperformed controls on the delayed test.

NEVILLE, MARY H., & PUGH, A. K. Ability to use a book: further studies of middle school children. *Reading* (UKRA), December 1977, *11,* 13-22.

Tests thirty British middle-school children on their ability to use a book effectively in locating information and compares results with findings from previous research. In the present report, subjects had received instruction in how to use a book; no such instruction had been given in the earlier comparison research. Scores were obtained on the *GAP* cloze test of comprehension and *Test AD, N.F.E.R.,* a sentence completion comprehension task. Subjects were given a book and a set of three questions to be answered in 10 minutes. Closed circuit TV was used to monitor performance on the task. Biserial correlation coefficients between both the GAP and N.F.E.R. test scores and the number of questions correct on the book use task were between .5 and .6 for both one or more correct/none correct and two or more correct/one or none correct. Actual methods utilized by subjects in the two studies did not appear to vary much. No clustering of the use of any particular method for locating inforation was noted. There was some suggestion that better readers profited more from instruction in location skills than did the less good readers. In a second section of this report, twenty-four of the same children were tested four years later in their final year in middle school. At this time, 62.5 percent of the sample obtained three correct answers compared with 27 percent in the previous report. Use of table of contents and index were viewed as before, and proportions of reading strategy in their use remained relatively similar to those found earlier. However, there was a decline from fifteen children who showed no apparent method in the earlier study to only six who did this at the end of the middle school years. Nearly all had the ability to skim by the end of their middle school years.

CUNNINGHAM, PATRICIA M. A compare/contrast theory of mediated word identification. *The Reading Teacher,* April 1979, *32,* 774-778.

Examines the facility of sixteen fourth and fifth graders to compare unknown 2-syllable words to known one-syllable words for puposes of identification. Subjects were selected for their ability to pronounce one-syllable words and their lack of ability at decoding 2-syllable words. Subjects were taught oral-aural recombining of syllables, then over a period of three weeks matched 200 2-syllable words to their store of thirty-five one-syllable words that were known. They were taught no rules for dividing words into syllables. After training, subjects were administered a 2-syllable word pronunciation task (the same task used in pre-treatment testing). The mean number of words in this task that were correctly pronounced was 8.01, compared to 4.31 in pretesting. Subjects showed a slight gain in ability to correctly divide words into syllables.

MASCIANTONIO, RUDOLPH. Tangible benefits of the study of Latin: a review of research. *Foreign Language Annals,* 1977, *10*(4), 375-382.

Cites evidence from eight educational projects which investigated the effects of studying Latin on the development of some English verbal skills, including reading.

FAIRBANKS, MARILYN M. Vocabulary instruction at the college/adult levels: a research review. In Gwyn Enright (Ed.) Personalizing learning systems: ecologies and strategies. *Proceedings of the Tenth Annual Conference of the Western College Reading Association,* 1977, *10,* 19-29.

Looks at recent research for guidance in designing and carrying out effective vocabulary development programs.

VAUGHAN, SALLY; CRAWLEY, SHARON; & MOUNTAIN, LEE. A multiple-modality approach to word study: vocabulary scavenger hunts. *The*

Reading Teacher, January 1979, *32,* 434-437.

Describes a research-based strategy for expanding students' vocabularies.

V-7 Teaching reading—high school

BJURSTROM, DIXIE POTTER. Reading as a secondary school subject. In Harold G. Shane & James Walden (Coordinators) *Classroom-relevant research in language arts.* Washington, D.C.: Association for Supervision and Curriculum Development, 1978. 85-106.

Claims that the literature on reading at the high school level abounds with suggestions for aiding teachers to help students in reading.

GILMORE, STAN. The use of discourse analysis in teaching an inferential reading comprehension skill. *Journal of Research in Reading,* September 1978, *1,* 128-135.

Studies the relationship between pupils' ability to comprehend inferential meanings and the teacher's use of a 3-part discourse structure in the discussion phase of a reading lesson. Subjects were twenty-five preservice secondary English teachers assigned to an experimental group (N=17) or a control group (N=8). Subjects were required to follow a competency-based teaching model consisting of three basic instructional parts, one aspect of which involved an eliciting/responding/reacting sequence of discourse analysis structure with their 12-year-old pupils. Teachers who made greater use of the elicitation/response/reaction structure enabled more pupils to infer the major themes of the stories than did those teachers employing fewer instances of the 3-part discourse structure.

LENNOX, W. H.; SMALL, J. J.; & KEELING, B. An experiment in teaching poetry to high school boys. *Research in the Teaching of English,* December 1978, *12,* 307-320.

Tests the efficacy of an approach to teaching poetry to high school age boys. A total of fifty-four high ability Australian 15-16 year olds were involved in the study in either the experimental (N=29) or the control (N=25) class. The experimental class was exposed to an approach to poetry carried out in eleven 30-minute sessions over a 4-month period. The method was evaluated by comparing subjects' gains on four criteria of poetry appreciation, before and after the instructional period, and by comparing gains with those made by the control group. On the whole, subjects' attitudes to poetry were unaffected, and no differences in attitude change were noted between groups. However, the experimental group appeared to improve in understanding of poetry more than did the controls. Measures of quality and fluency of writing poetry produced inconclusive results.

VACCA, RICHARD T. The effect of expanded directions and adjunct aids on students' comprehension of world history text. In P. David Pearson &

Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978. 222-225.

Studies the facilitative effect of expanded directions and adjunct aids on the ability of seventy-four grade 10 students to comprehend a world history text. Classes were assigned randomly to one of four experimental treatments or to a control treatment. The control class received neither expanded directions nor adjunct aids but merely read the text. The other groups all received expanded directions and one of the following: 1) no adjunct aids, 2) pre-exposure to adjunct aids, 3) post exposure to adjunct aids, or 4) adjunct aids interspersed within each selection. Adjunct aids consisted of sets of statements which represented interpretations of the text selection. Materials included three sections from two chapters in a world history text. They were 1,000 to 1,500 words in length. All subjects were given a 30-item multiple-choice test at the end of the experiment. Students receiving expanded directions combined with interspersed aids performed better than either the control group or the group receiving expanded directions only.

MANZO, ANTHONY V. "Imbedded aids" to readers: alternatives to traditional textual material. *New England Reading Association Journal,* 1979, *14,* 13-18.

Presents an alternative to current textbook conventions called Imbedded Aids and cites findings from two studies on the value of these study aids in improving reading comprehension. One study utilized science material; the other, social studies. Both were done with tenth graders. In the science study, about 100 students used Imbedded Aids materials and about 100 used a non-altered version of the same chapter from a chemistry text. On a 30-item short answer test following the reading of the chapter, the groups using the Imbedded Aids scored 10-15 percent higher and took 7 percent longer to finish the text. For the social studies research, over 500 students in ten schools were involved. No statistically significant differences were found on a 50-item short answer test between controls and experimentals. Subjects said that they had no difficulty using the aids and 75 percent indicated that they would like to see them throughout the text. Teachers also tended to support the use of aids.

MCPHAIL, IRIVING P. A psycholinguistic approach to training urban high school students in test-taking strategies. *The Journal of Negro Education*, Spring 1978, *48*, 168-176.

Utilizes a psycholinguistic approach to teaching test taking strategies to fifty-four twelfth graders. Scores from the *California Achievement Test* were used as baseline scores for assessing achievement gains. Specially constructed versions of the *Iowa Silent Reading Test* were used in teaching test-taking strategies. Subjects were exposed to two experimental treatments: a traditional test taking training program, or a psycholinguistics cues curriculum. Training was conducted over a 47-day period. Results showed evidence of treatment effects for the experimental groups, although the differences were not statistically significant. The author also reports results of student interviews regarding the affective dimension of the test taking training program.

Stoodt, Barbara D., & Balbo, Elvira. Integrating study skills instruction with content in a secondary classroom. *Reading World,* March 1979, *18,* 247-252.

Incorporates three factors to aid twelfth-grade economics students in reading their materials. The factors included were 1) assistance to the content area teacher in teaching study skills, 2) opportunities for students to develop study skills, and 3) opportunities for the transfer of study skills to the content area. The study skills taught were outlining, locating information, vocabulary in context, chart interpretation, and study reading. Instruction occurred over a 9-week period in one experimental classroom. A control classroom was taught by the same teacher. A pre- and posttest informal inventory covering both study skills and content knowledge was administered. The control group showed no significant difference between pre- and posttest scores. The experimental group showed both a significant gain between pre- and posttest scores and also scored significantly higher than did the control group.

V-8 Teaching reading—college and adult

Call, Patricia E. Views of college administrators concerning college reading improvement programs: report of a study in West Virginia. *Reading World,* October 1978, *18,* 81-84.

Reports results of a questionnaire sent to twenty-five academic deans or top administrators in West Virginia to determine who offered college Reading Improvement programs, why they had been established, and which students could benefit. All questionnaires were returned. The most frequent reason offered for establishment of reading programs was low scores on the verbal section of the college entrance examination. Most administrators (60 percent) felt that reading improvement programs were important for all students. Nineteen respondents (76 percent) reported programs; two planned a program in the near future, and none planned to terminate an existing program.

Clymer, Carol. A national survey of learning assistance evaluation: rationale, techniques, problems. In Gwyn Enright (Ed.) *Learning assistance: charting our course.* San Diego: Proceedings of the Eleventh Annual Western College Reading Association Conference, 1978, *11,* 21-30.

Gives results of a 27-item questionnaire sent to 231 directors of college learning assistance programs asking about the type of program; population served; funding sources; evaluation rationale, frequency, and importance; and extent of revision after evaluation. A total of 181 completed questionnaires provide the basis for the data. A majority of the programs had as their objective to assist students in developing skills enabling them to succeed in college. Over half of the respondents felt that students demonstrated improvement during the course. Programs are most frequently evaluated by means of center usage, user questionnaires, and standardized test results.

DEMPSEY, JUNE. Learning assistance: charting our course within reach. In Gwyn Enright (Ed.) *Learning assistance: charting our course.* San Diego: Proceedings of the Eleventh Annual Western College Reading Association Conference, 1978, *11,* 1-11.

Suggests way of developing and modifying college level learning assistance programs and reviews relevant research.

COVINGTON, HELEN C., & MOUNTAIN, LEE. The competencies that junior college chairpersons expect from their reading course graduates. In P. David Pearson & Jane Hansen (Eds.), Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978. 246-249.

Surveys twenty-eight Texas junior college reading department chairpersons to determine the competencies expected from graduates of reading courses. The respondents were also asked to provide the major components of junior college developmental reading courses and areas in which courses could be improved. A 21-item questionnaire with a 5-point scale (ranging from Highly Important to Unimportant) was designed to assess the importance of items in the reading program. Six of the twenty-one items were judged most important to reading courses; four of the six were in the area of comprehension in context. Among the program improvements susggested were: communicating the importance of reading to students, better faculty-student communication, an improved sequencing of courses, and more diagnostic-prescriptive teaching. No significant differences were found between responses by chairpersons of large and small departments.

ORLANDO, VINCENT P., & HAYWARD, KRISTINA G. A comparison of the effectiveness of three study techniques for college students. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978. 242-245.

Assesses the effectiveness of study techniques with college students. The three techniques used were: 1) reading and then rereading, 2) reading with periodic mental review, and 3) reading with notetaking. Forty-eight undergraduates were randomly assigned to one of the study techniques utilized with an 800-word passage divided into ten paragraphs of seven sentences each. A 40-item immediate and delayed-recall test was given over the passage. On the immediate recall test, notetaking and mentally reviewing were superior to rereading; on the delayed test, no significant differences were found. Inasmuch as notetakers took more time than did the students who mentally reviewed for the immediate recall, the authors conclude that the mental-review study technique was the most efficient study method.

EANET, MARILYN G. An investigation of the REAP reading/study procedure: its rationale and efficacy. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978. 229-232.

Assesses the efficacy of a reading/study procedure (REAP) for increasing reading achievement test scores. Participants were 105 undergraduates enrolled in a college reading and study skills class. The six sections of the class were randomly assigned to one of three treatment conditions: 1) the experimental or REAP group; 2) an experimental-control group receiving instruction in SQ3R and related skills practice; and 3) a control group receiving instruction in affective readiness for study skills with subsequent instruction and practice in study skill areas not directly related to study-reading or comprehension improvement. Instruction occurred over a 4-week period. The *Nelson-Denny Reading Test* and the *Reading Practices Mini-Inventory* was administered during the first week of the semester. REAP subjects were also given the *Matching Familiar Figures Test,* an assessment of cognitive style. During the sixth week, two measures involving written recall of significant ideas, one immediate and one delayed recall; two objective recognition tests given following the delayed recall test; and two written reflective responses were collected from each subject and judged against previously established criteria. In general, the control group made the highest scores, followed by the REAP group, and the experimental-control group. Based on a self-assessment questionnaire, the REAP group found the procedures followed in their instruction of use and tended to incorporate the procedures.

JOHNSON, DARWIN, & WEN, SHIH-SUNG. Effects of correct and extraneous markings under time limits on reading comprehension. *Psychology in the Schools,* October 1976, *13,* 454-456.

Assesses the effect of reading marked sections under time pressure on the reading comprehension of 262 Black college undergraduates. Subjects were randomly assigned to two experimental and one control group. The Delayed Recall subtest of the *California Test of Mental Maturity* was modified to be presented in a reading rather than a listening format. Three forms were prepared with varying percentages of correct and extraneous overlinings. Reading time was limited to two and one-half minutes, but there was no time limit for answering the twenty-five multiple choice questions accompanying the material. Marking relevant to the criterion measure facilitated reading comprehension, while marking extraneous to the criterion impaired reading test performance. Students above the mean on a psychology course grade scored significantly better than did those whose course grade was below average.

FREMOUW, WILLIAM J., & FEINDLER, EVA L. Peer versus professional models for study skills training. *Journal of Counseling Psychology,* November 1978, *25,* 576-580.

Evaluates the benefits of a peer-tutoring model for both tutor and tutee and compares the effectiveness of a professional training model with an attention control and a no-treatment control on self-report and performance measures. In the professional model, subjects consisted of seventeen college freshmen who received ten hours of instruction in study skills taught by one professional. In the peer model, subjects were divided into sixteen pairs of tutors and tutees. Tutors met once a week for five 90-minute training sessions. After each training session, they conducted two one-hour sessions with their tutees. An attention-control group of fourteen subjects met for ten hours in a course to improve assertion and social skills. The no-treatment control group included twelve subjects placed on a waiting list for the study skills course and twelve subjects who were a minimal-contact group. The *Study Skills Survey* (SSS) and the *Skills Test* were administered as pre- and posttest measures and changes in grade point average (GPA) were also recorded. On the *Skills Test* the tutor and tutee group improved signficantly compared to the no-treatment group, and the tutor groups differed significantly from the attention-control group. The results also showed that both tutors and tutees improved on the Study Organization Survey part of the SSS and on the *Skills Test*. Subjects in the professional model improved on the Study Organization and Study Technique Surveys of the SSS but did not show significant changes on the *Skills Test*. Improvement in GPA by the tutee, tutor, and professional model groups was .19, .33, and .40, respectively.

COHEN, ELAINE LANDAU, & SMITH-GOLD, DAVID A. Your students' cognitive functioning: an important factor in readiness to learn. In Gwyn Enright (Ed.) *Learning assistance: charting our course.* San Diego: Proceedings of the Eleventh Annual Western College Reading Association Conference, 1978, *11,* 31-34.

Examines the relationship between college students' levels of cognitive functioning and ability to perform complex academic tasks. Sixty-three students enrolled in a developmental reading class in an innercity, open-door 4-year college served as subjects. Subjects were pre- and posttested on the *McGraw-Hill Reading Test,* the *Watson-Glaser Test,* and a paper-pencil test of seven cognitive tasks involving ratio, probability, proportion, combinatorial reasoning, analogies, abstractions, and controlling for variables. Subjects were placed in either an experimental or control group. Experimentals were exposed to a program geared to move them from a concrete or functional level of functioning to a higher level. Preliminary testing showed that 31 percent of experimentals and 17 percent of controls had moved from either concrete to transitional or transitional to formal levels. Both groups made significant gains on the Watson-Glaser and reading tests.

BOOTHE, LORRAINE M., & MCIVER, ANN E. Psycholinguistics in rapid reading. In Gwyn Enright (Ed.) *Learning assistance: charting our course.* San Diego: Proceedings of the Eleventh Annual Western College Reading Association Conference, 1978, *11,* 15-20.

Teaches college students strategies for reading based on a psycholinguistic model and assesses the results. Pre- and posttest scores for 101 students were collected on the Reading Rate and Comprehension section of the *McGraw-Hill Basic Skills Reading Test.* The course lasted a total of 18 hours over a 6-week period. Subjects showed a mean increase of 154 words per minute with maintained comprehension in easy material and a mean increase of 99 words per minute in hard material with slightly increased comprehension.

DANSEREAU, DONALD F.; COLLINS, KAREN W.; MCDONALD, BARBARA A.; HOLLEY, CHARLES D.; GARLAND, JOHN; DIEKHOFF, GEORGE; & EVANS, SELBY H. Development and evaluation of a learning strategy training program. *Journal of Education Psychology,* February 1979, *71,* 64-73.

Describes and evaluates in two experiments the effectiveness of a strategy system used as a study technique with college students. Three groups of students were compared on their scores from a series of textbook related tests studied seven days earlier. Group 1 consisted of thirty-eight subjects in a learning strategy class; Group 2 consisted of a comprehension/retention control group of twenty-eight subjects; and Group 3 (N = 21) was designated the subjective report control group. In addition to the three multiple-choice text-related tests, subjects were also given the *Test Anxiety Scale,* the *Survey of Study Habits and Attitudes,* a 46-item questionnaire designed to tap concentration difficulties and coping skills, and a 12-item inventory designed to tap students' perceptions of their own academic abilities. Students receiving the learning strategy training showed significantly greater positive pre- and postcourse changes on comprehension/retention and self-report measures than did control subjects.

MCPHAIL, IRVING P. A summer reading/study skills program for Black and minority health professions students. *Reading World,* October 1978, *18,* 48-66.

Describes the organization, implementation, and evaluation of a summer reading/study skills program for Black and minority students entering the health professions. Included in the program is the administration of the *Brown-Holtzman Survey of Study Habits and Attitudes* and *Survey of Reading/Study Efficiency* as pre- and posttests. Students are taught various notetaking and study skills. Student evaluations of the course are included, and it is noted that only two of fifty-two students who participated in the program withdrew from school for academic reasons.

MONTEITH, MARY K. Beyond basic skills courses in colleges to courses in basic concepts and content area reading. *Journal of Reading,* October 1978, *22,* 74-77.

Summarizes some reports of courses designed to meet the needs of the basic skills student.

MABEE, W. SCOTT; NEIMANN, JOAN; & LIPTON, PATRICK. The effects of self-pacing and use of study guide questions within behavioral instruction. *The Journal of Educational Research,* May/June 1979, *72, 273-276.*

Investigates the effects of self- versus instructor-pacing and study guide questions on final course achievement in a behavioral instruction course. Included in the research were 172 undergraduate students enrolled in four sections of an introductory educational psychology course. Treatments were randomly assigned to intact groups. Treatments were self versus instructor pacing and the use versus the non-use of study guides. In addition to group membership, data collected included grade point average (GPA) and number of psychology courses previously completed. A 50-item achievement test covering the content of the text used served as the criterion variable. Only pacing, GPA, and their interaction were significantly correlated with course achievement. A factor analysis showed GPA contributed most significantly to course achievement as measured by the test. Students with high GPAs performed better under self-pacing.

ROBYAK, JAMES E. A revised study skills model: do some of them practice what we teach? *The Personnel and Guidance Journal,* November 1978, *56,* 171-175.

Furnishes the implicit assumptions and relevant research underlying the counseling approach and the study skills approach to remedying marginal academic performance. Merges the dominant findings of each approach into a conceptual framework.

DAVIS, J. KENT., & ANNIS, LINDA. The effect of study techniques, study preferences, and familiarity on later recall. *The Journal of Experimental Education,* Winter 1978/1979, *47,* 92-96.

Manipulates three commonly used study techniques with an assigned preferred or nonpreferred study technique to determine the most effective approach. In addition, the effect of familiarity or unfamiliarity with an assigned reading topic was also investigated. Subjects were 262 undergraduates who filled out a questionnaire on their preferred mode of study. The results were used to assign half the subjects to their preferred mode of study and half to their nonpreferred methods. Subjects were given an article and asked: 1) to read only, 2) to read and underline, or 3) to read and take notes on the article. A week later half the subjects were given a 10-minute review period prior to taking a test given to all subjects over the material. For individuals who preferred the study technique of reading and who were familiar with the topic, reading produced the best performance on the posttest. Least effective performance was produced by reading when a person preferred to read but was unfamiliar with the topic.

BEAN, THOMAS W. The influence of a structured overview on comprehension and oral reading miscues of selected college students. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978. 218-221.

Presents two exploratory studies designed to examine the effect of a structured overview on the comprehension and oral reading miscues of college undergraduates. In the first study, eighty-five subjects participated in either the structured overview treatment or control conditions. Following the reading of a health education article, subjects took a 15-item comprehension test. The structured overview group received significantly higher mean scores than did the control groups. In the second study, ten students were randomly assigned to either a structured overview or a placebo overview condition. Subjects read the health education passage orally after receiving pre-instruction in the appropriate overview. Oral reading was analyzed using a miscue analysis procedure and subjects also took a 4-item short essay test. No significant differences were noted for comprehension or miscue.

ILIKA, JOSEPH, & LONGUION, BONNIE. College reading center approach to improvement of reading with state employees. In Gwyn Enright (Ed.) Personalizing learning systems: ecologies and strategies. *Proceedings of the Tenth Annual Conference of the Western College Reading Association,* 1977, *10,* 49-55.

Describes and evaluates the adaptation of a college level reading program to a group of state employees. Subjects were asked to select from among thirty-eight behavioral objectives those that they wished to worked toward. Subjects were then given a program that included study skills, vocabulary improvement, skimming and scanning, and critical reading. The *McGraw-Hill Basic Systems Reading Test* and the *Nelson-Denny Reading Test* were administered as pre- and posttests. Differences between mean scores on the pre- and posttests were significant for rate, flexibility, skimming and scanning, and vocabulary. No differences were noted for retention or comprehension scores.

STEINER, KAREN. Speed reading revisited. *Journal of Reading,* November 1978, *22,* 172-176.

Surveys recent ERIC documents on use of speed reading methodologies and their effectiveness.

SCHNELL, THOMAS R. Identifying the basic elements of critical reading. *Reading Horizons,* Fall 1978, *19,* 34-39.

Overviews current definitions of critical reading and reviews related research.

MANNING, DIANE THOMPSON. Everyday materials improve adults' reading. *Journal of Reading,* May 1978, *21,* 721-724.

Describes a program using everyday materials for teaching reading skills to adult poor readers. Subjects were unemployed adult females being paid by CETA to attend a 15-week training program. Instructional materials utilized were identified from an interest inventory given to students attending the course. All subjects were administered alternate forms of the reading subtests on the

CTB McGraw-Hill Tests of Adult Basic Education, Level D as pre- and post-measures. Preliminary results reported showed that subjects improved significantly on the reading vocabulary subtest and showed improvement (not significant) on the reading comprehension subtest.

HUTCHISON, LAVERIA F. The relationship between expressed interests and reading achievement in functionally illiterate adults. *Reading Improvement*, Fall 1978, *15*, 203-207.

Asks whether lessons designed to emphasize students' expressed interests improve the silent reading skills of functionally illiterate adults. An experimental group and a control group of twenty functionally illiterate adults each was formed. Classes met for 2-hour sessions, twice weekly, over a 15-week period. Pre- and posttest scores on the Adult Basic Learning Examination, Level 1, were collected to determine growth. In the experimental group, interest preferences of subjects were emphasized. Subjects in the experimental group recalled information and interpreted word meanings from context significantly better than did controls.

WILSON, MOLLY M. Future shock and the aged: is reading a cure or part of the problem? In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference*, 1978. 193-196.

Suggests that reading may constitute a partial solution for adaptation problems of the elderly. Cites some results of research on reading and the aged.

V-9 Teaching materials

TALMAGE, HARRIET, & WALBERG, HERBERT J. Naturalistic, decision-oriented evaluation of a district reading program. *Journal of Reading Behavior*, Summer 1978, *10*, 185-195.

Designs and implements an evaluation research study for selecting a basal reading series for adoption and explores other factors possibly related to reading achievement. Five basal series were pilot tested in a total of sixty classrooms including grades 1, 2, 3, and 6. In grade 1, the *Metropolitan Reading Readiness Test* was used as a pretest measure and the *SRA Reading Tests* as a posttest measure. At all other grade levels, the SRA tests were used as both pre- and posttest measures. Other data collected included teacher characteristics, classroom learning environment, and instructional characteristics. Regression analysis indicated that achievement was unaffected by series or by teachers' years of teaching, amount of inservice preparation, number of formal reading courses, or awareness of the series' design. Competitiveness in the learning environment and pretest reading scores were the only variables predicting posttest reading scores.

BRADLEY, KARLA R.; BALDWIN, R. SCOTT; & HESS, ROBERT J. A comparison of reading expectancy with actual achievement. *Reading*

Improvement, Winter 1978, *15,* 263-266.

Compares reading expectancies from two formulas and also residual gain scores of students referred by the formulas. Subjects were 113 grade 4, 5, and 6 pupils referred to a reading clinic. The *Peabody Picture Vocabulary Test* was used to give IQ scores, and the *California Achievement Test* was used for pre- and posttest assessments of reading achievement. Two reading expectancies were computed for each subject using the Harris and the Bond and Tinker formulas. Subjects were then placed in one of four categories: 1) referred as reading disabled by both formulas, 2) referred by Harris only, 3) referred by Bond and Tinker only, 4) referred by neither formula. While both formulas tended to give comparable estimates of reading retardation, subjects uniquely referred by the Harris formula made significantly greater gains during instruction than did those referred only by the Bond and Tinker formula.

Gourley, Judith W. This basal is easy to read—or is it? *The Reading Teacher,* November 1978, *32,* 174-182.

Suggests three specific cases where theory and research give reason to believe the language used in basal readers is unnatural.

Lowery, Lawrence F., & Leonard, William H. Development and method for use of an instrument designed to assess textbook questioning style. *School Science and Mathematics,* May/June 1978, *78,* 393-400.

Proposes and describes an instrument designed to evaluate questions and questioning styles of science textbooks. The *Textbook Questioning Strategies Assessment Instrument* (TQSAI) is comprised of a 2-dimensional grid upon which items are tallied from a random sample of pages from each textbook being assessed. Calculations made of the tallies indicate ratios of types of questions asked, types of science/learning (inquiry) processes expected to be performed by students, and relationships between the questions and the processes. In addition, the grid indicates the textbook's style in terms of involving students in direct or indirect experiences. The relationship of the total number of questions to the total number of sentences can also be obtained. The following question categories are included in the TQSAI: 1) Rhetorical questions, 2) direct-information questions, 3) focusing questions, 4) open-ended questions, 5) valuing questions, 6) observing questions, 7) communicating questions, 8) comparing questions, 9) organizing questions, 10) experimenting questions, 11) inferring questions, and 12) applying questions. The authors provide directions for using the TQSAI, as well as suggestions for data analysis and interpretations.

Stotsky, Sandra L. Teaching prefixes in the elementary school. *The Elementary School Journal,* March 1978, *78,* 278-283.

Analyzes six conventional reading series, grades 2 through 6, in order to determine what prefixes are taught and at what grade level various prefixes are introduced into instruction. Variations among reading series were discovered in terms of grade levels at which prefixes are introduced. Some reading series were found to omit particular prefixes, and some reading series were found to give only partial instruction in the meanings of certain prefixes. The most common prefixes and base words are listed in the study, as well as recommendations for teaching five "problem" prefixes.

JACOBSON, MILTON D.; KIRKLAND, C. ERIC; & SELDEN, RAMSAY W. An examination of the McCall-Crabbs Standard Test Lessons in Reading. *Journal of Reading,* December 1978, *22,* 223-230.

Compares the 1926 and 1961 McCall-Crabbs graded norms and also compares both gradings with 1976 empirical data. In the 1961 edition of McCall-Crabbs, about 86 percent of the original lessons were retained and 61 percent are duplicates of those in the 1925-26 lessons. Of this 61 percent or 237 lessons, 135 were identical in both story and questions, while the remaining 102 differed in the number of questions asked. Sixty-five of the identical lessons were among those administered in 1976 to pupils in grades 4, 6, 9, and 12. Pupils in grades 6, 9, and 12 received five McCall-Crabbs lessons, and fourth graders completed four. Inasmuch as 1926 and 1961 norms were found to be comparable, the 1976 data was compared with 1961 norms only. There was a significant difference between the scores obtained using the 1961 norms and those obtained from the 1976 data. The authors concluded that the McCall-Crabbs norms no longer accurately predict the expected performance of pupils.

LEWANDOWSKI, GLEN. A different look at some basic sight-word lists and their use. *Reading World,* May 1979, *18,* 333-341.

Examines the words common to and the phonic characteristics of three basic sight word vocabulary lists. The word lists examined were the Dolch, Kucera-Francis, and 240 Starter Words. There were 133 words common to each list plus 201 words common to two of the lists. Of the 334 words, only 197 need to be taught initially with sight-word techniques, while 137 were completely phonically consistent.

WALKER, CHARLES MONROE. High frequency word list for grades 3 through 9. *The Reading Teacher,* April 1979, *32,* 803-812.

Describes the development of a list of 1,000 words of high frequency of occurrence in both voluntary and assigned reading in grades 3 through 9 in the U.S.

MARZANO, ROBERT J.; LARSON, JEAN; TISH, GERI; & VODEHNAL, SUE. The graded word list is not a shortcut to an IRI. *The Reading Teacher,* March 1978, *31,* 647-651.

Examines the predictive validity of the graded word list as an index of reading ability with thirty-seven fourth through eighth graders. An informal reading inventory (IRI) and a graded word list (GWL) were administered to each student. Thus, two independent, two instructional, and two frustration reading levels were established for each student. Product moment correlation coefficients for the GWL and IRI at the three reading levels ranged from .54 to .61. It was concluded that actual grade placement was a better predictor of reading ability than [illegible].

Mangieri, John N. Dolch list revisited. *Reading World,* October 1978, *18,* 91-95.

Ascertains the degree of utilization of the 220 Dolch sight words in four current widely used basal series. A 3,000 running-word sample was selected from the primer, first, second, and third grade readers of each series. The word sample excluded proper nouns and used 1,000 words from the beginning, middle, and end of each reader. Words were then classified as Dolch words or non-Dolch words. The proportions of Dolch words contained at each level ranged from 72 percent to 82 percent at first grade, 66 percent to 71 percent at second grade, and 56 to 65 percent at grade 3. Of the entire list of 220 words, only three did not appear in any of the samples, while the remaining 217 appeared one or more times.

Reich, Carol M., & Reich, Peter A. The construction of an orally based sight-word vocabulary list and its relationship to the vocabularies of beginning readers. *The Journal of Educational Research,* March/April 1979, *72,* 198-204.

Proposes to construct a sight-word vocabulary list based on children's speech productions and compares the list obtained with existing vocabulary lists. Four groups of children from Toronto were used: Canadian-Advantaged, Canadian-Disadvantaged, New Canadian (Integrated)-Disadvantaged, and New Canadian (Segregated)-Disadvantaged. Teachers in the four schools taped the speech of a sample of their grade 1, 2, and 3 children. The total speech sample averaged 407 words per child and were computer analyzed to identify the 200 most frequently occurring lexical items. The result for the four lists was 35 percent function and 67 percent content words. The overlap among groups was 94 percent for function words and 76 percent for content words. A comparison made with eight existing sight word lists showed a high level of agreement. Another analysis compared the four Toronto-based lists with words in six basal programs. The average level of agreement for function words was 89 percent; for content words, 49 percent.

Carducci-Bolchazy, Marie. False prerequisites in learning to read. *Reading Horizons,* Summer 1978, *18,* 294-302.

Selects specific skills from the word attack compnent of the *Wisconsin Design for Reading Skill Development* to determine whether or not they are prerequisite skills for competence in reading. Two approaches were used in collecting data. In the first, twenty-five grade 8 students who scored at or above the 50th percentile on a standardized reading test were tested on five components of the Wisconsin Design: three letter consonant blends, two vowels together, final vowel, accent, and syllabication. At least 60 percent of the students failed to meet the criterion of 80 percent correct on the final vowel test and on the accent test. The second set of data was collected in two school districts using the Wisconsin Design. A survey form was completed by eight third grade teachers, seven fourth grade teachers, and six fifth grade teachers. In the survey, teachers indicated what percent of their competent readers (70th percentile or better on a standardized measure) could pass each of eight subtests of the Word Attack Component of the Wisconsin Design, levels C and D (grades 2 and 3). Grade 3 teachers indicated that at level C, many competent readers would not pass long vowel sounds, two vowels, and final vowel sounds. On the level D syllabication test, grade 3 and 4 pupils were felt to be weak by teachers; on the accent test, teachers at all grade levels felt that many of their competent readers would have problems. The author concluded that the two sources of data indicated that skill with the final vowel generalization and with selecting correctly-accented words were not prerequisite skills. In addition, the survey results suggested that long vowel sounds, two vowels together, and silent letters may not be prerequisite to reading skills.

KURTH, RUTH JUSTINE. Evaluation of an objective-based curriculum in word attack. *Journal of Reading Behavior,* Winter 1978, *10,* 445-446.

Collects data to test the assumption that if basic subskills of word attack are mastered, functional word attack ability will follow. Subjects included sixty-nine boys and seventy-one girls chosen from grades 4 and 6 in six public schools where the *Wisconsin Design for Reading Skill Development* was employed. A stratified random sampling of 1,013 words from the Kucera and Francis list was divided into seven categories, and then placed into eight lists containing six words from each category. Additionally, two test lists composed of synthetic words were developed. Subjects were individually tested with one synthetic word list and one real word list. It was found that at least 90 percent of subjects could decode at least 80.6 percent of the synthetic words, at least 78.43 percent of all phonetically regular words, and at least 65.01 percent of all irregular words tested. However, for three of the eight categories of words in the sample, a mastery level of 80 percent correct was not achieved by 90 percent of the subjects.

SANTEUSANIO, RICHARD P. A school district selects a management system. *New England Reading Association Journal,* 1979, *14,* 22-29.

Determines the overall effectiveness of two reading management programs used at the primary levels and one used at the intermediate grades in one school district. Children in three elementary schools used a management system, while three schools were used for control purposes. The Croft Word Analysis and the Fountain Valley were used at the primary levels and the Croft Comprehensive Program was used in grades 4-6. All children were diagnosed with a criterion-referenced test, but the results were supplied to the management schools only. The *Stanford Achievement Test* (SAT) was given to all pupils at the end of the school year, and children involved in the Croft programs received a second criterion-referenced test. The control group scored better than did the Fountain Valley group on the total SAT and on the vocabulary and study skills subtests. No significant differences were found between the control groups and the Croft Program groups at either the primary or intermediate levels on the SAT. However, the criterion-referenced test results favored the treatment group. A teacher questionnaire was sent to teachers in the three schools involved as well as to teachers in two other schools where two different management systems were used. Twenty out of 28 teachers felt that children were not reading better as a result of using the program. Responses favoring adoption of a system were nineteen to sixteen.

LOWERY, LAWRENCE F., & LEONARD, WILLIAM H. A comparison of questioning styles among four widely used high school biology textbooks. *Journal of Research in Science Teaching,* January 1978, *15,* 1-10.

Examines the questioning style among four widely used high school biology textbooks in terms of types, frequency and placement of questions in textual reading materials, as well as congitive level of questions contained in the materials. An experimental instrument, the Textbook Questioning Strategies Assessment Instrument, was used to compute the ratio of questions to sentences per page of textual material and the frequencies of the questions tallied. Cognitive categories used for typing questions included: observing, communicating, comparing, organizing, experimenting, inferring, and applying. Significant differences were discovered for ratios of questions to sentences between all pairwise contrasts of the four high school biology textbooks in the study, except for one pair. Question frequency ranged from 31 percent to 71 percent. A number of differences were found with reference to question types among the four textbooks.

MOORE, ROBERT B. *Two history texts: a study in contrasts.* New York: The Racism and Sexism Resource Center for Educators.

Compares two textbooks dealing with the history of Mississippi that were involved in a legal suit filed against the Mississippi History Textbook Committee and the Mississippi State Textbook Purchasing Board aimed at allowing school districts to adopt either of the textbooks. The textbooks were examined with reference to formats, illustrations and word usage, as well as their treatment of the cultures and histories of native Americans, African Americans, other racial and ethnic groups, and women in Mississippi. The comparison also focuses on the way in which the textbooks handled content concerns such as slavery, reconstruction, and civil rights. The adopted textbook was found to violate a number of the criteria used by the adoption committee and was labeled an example of "mythologized history." The textbook rejected by the state adoption committee was judged one of the best history textbooks to be found.

HITTLEMAN, DANIEL R. Readability, readability formulas, and cloze: selecting instructional materials. *Journal of Reading,* November 1978, *22,* 117-122.

Examines two aspects of readability in an attempt to identify a means for judging the suitability of instructional materials for particular populations. Related reseach is reviewed.

CAMPBELL, ANNE. How readability formulae fall short in matching student to text in the content areas. *Journal of Reading,* May 1979, *22,* 683-689.

Addresses the problem of matching a reader with appropriate texts in content areas. Discusses some research that demonstrates the complexity of the issue.

HUNT, ADRIANNE P., & REUTER, JANET R. Readability and children's picture books. *The Reading Teacher,* October 1978, *32,* 23-28.

Conducts a readability study of a randomly selected sample of fifty-two picture books published from the 1940s to the 1970s. Books were analyzed using the Fry readability graph. Readability levels ranged from grade 1 to grade 7 with fifteen of the books written at first grade level. A listing of the books with their readability levels is presented.

BRITTON, GWYNETH E., & LUMPKIN, MARGARET C. Readability labeling: an answer to the middle grade slump. *Reading Improvement,* Fall 1978, *15,* 162-169.

Applies readability formulas to 772 stories in two reading series in an attempt to verify the reading grade levels assigned by the publishers. A computerized readability analysis program developed by the authors was utilized. The formulas included were the Spache, Harris-Jacobson, Dale-Chall, Fry, and Flesch. It was found the 70 percent or more of the middle grade stories were written above the publisher's designated reading grade levels. At the primary grades the percent of stories written above the designated grade levels ranged from 25 to 56; at grades 7 and 8, the range was from 34 percent to 43 percent.

LINDSEY, JIMMY D.; BECK, FRANCES W.; DEVLIN, ROBERT J.; LUTHER, TAMA W.; & MARSHALL, GEORGE M. Cloze procedures and readability: an objective measure for selecting special education textbooks for undergraduates. *Reading Improvement,* Spring 1979, *16,* 5-9.

Investigates readability as a criterion for textbook adoption. Subjects included fifty undergraduate education majors who were administered the *Nelson-Denny Reading Test* to determine comprehension and rate. Additionally, three cloze passages of about 100 words in length from each of three special education textbooks were developed. Textbooks and passage theme interacted disordinally to effect reading comprehension. Results indicated that introductory special education textbooks differed significantly in readability.

KEETZ, MARY A. The readability of study habit books and college students' reading ability. *Journal of Reading Behavior,* Spring 1978, *10,* 97-101.

Determines the readability levels of fourteen study habits books and compares the results to reading test scores of college students. The *Davis Reading Test* scores of 110 students enrolled in reading and study skills classes and 1,145 entering freshmen were used in the comparison. Readability within each book varied as much as nine grade levels. Anywhere from one percent to 20 percent of the entering freshmen fell below the grade level placement of specific books. For the 110 students enrolled in the reading class, the range who fell below the readability level of texts was from 4.5 percent to 43.6 percent.

WRIGHT, GARY. The comic strip in the classroom for the reluctant disabled reader. *Reading Improvement,* Spring 1979, *16,* 13-17.

Presents readability level data on twenty popular comic strips. Average readability levels ranged from 1.8 for *Tiger* and *Dennis the Menace* to 6.9 for *Prince Valiant.* One-third of the comic strips had an average readability level below third grade while seven-tenths averaged below fourth grade.

FITZGERALD, GISELA G. Why kids can read the book but not the workbook. *The Reading Teacher,* May 1979, *32,* 930-932.

Surveys the readability levels of forty-two workbooks designed to accompany basal readers at grades 3-6. The Fry readability graph was used in examining the prose selections in the workbooks. Only three of the forty-two workbooks examined agreed with the grade level designation. Workbooks at grades 3, 4, and 5 showed deviations of three grade levels from their grade designations.

HYDE, MARGARET A. Reading ability and readability assessing the gap on a limited budget. In Gwyn Enright (Ed.) Personalizing learning systems: ecologies and strategies. *Proceedings of the Tenth Annual Conference of the Western College Reading Association,* 1977, *10,* 35-41.

Investigates the existence and extent of reading deficiencies among an undergraduate population and the degree to which the deficiencies were contributing to over-all academic deficiencies and attrition. The *Nelson-Denny Reading Test* was administered to 110 students. Based on Grade 13 norms, only one-fifth of the subjects were at or above the 50th percentile on the Nelson-Denny while 60 percent scored at or below the 25th percentile. Reading levels were compared with readability levels of various textbooks required of students. A computerized readability program, STAR, was used to obtain readability levels of texts. Of the textbooks surveyed, 26 percent fell at grade 15 or above, 18 percent at grade 14 level, and 13 percent each at grade levels 11, 12, and 13. Only two texts showed a within-text range of less than five grade levels. The author concluded that 84 percent of the texts surveyed were beyond the reading capabilities of 50 percent of the students tested.

CALDWELL, EDWARD C.; ROTH, SANDRA W.; & TURNER, RALPH R. A reconsideration of phonic generalizations. *Journal of Reading Behavior,* Spring 1978, *10,* 91-96.

Reports on the consistency of phonic generalizations based on the most frequently occurring 18,000 words from the Kucera and Francis list. Words were analyzed by a computer program to determine frequency of occurrence of bigrams, trigrams, tetragrams, pentagrams, hexagrams, and heptagrams or ngrams. Both frequency of occurrence in running text (sheer frequency) and frequency of occurrence of the ngram in the 18,000 words (word frequency) were tabulated. Comparisons with previous phonic generalization studies were also made. Rather high agreement was noted with the earlier studies but some notable exceptions appeared. The author suggests that along with frequency, rule complexity be considered as a crucial variable in determining utility. When the rules were analyzed for both consistency and complexity, only nine were reported as useful.

V-10 Teaching—grouping

GUTHRIE, JOHN T. Grouping for reading. *The Reading Teacher,* January 1979, *32,* 500-501.

Summarizes some research on the effect of grouping patterns on reading achievement.

HOGBEN, DAVID. Grouping primary school pupils for instruction in reading on the basis of scores from standardized reading tests. *The Australian Journal of Education,* October 1978, *22,* 295-302.

Examines some of the problems and hazards associated with the practice of forming and reforming "homogeneous" ability groups for reading instruction solely on the basis of standardized reading test scores. Some research is cited.

KOSMOSKI, GEORGIA J., & VOCKELL, EDWARD L. The learning center: stimulus to cognitive and affective growth. *The Elementary School Journal,* September 1978, *79,* 47-54.

Seeks to examine the effect that an open-concept program using a learning center complex has on pupils' academic achievement and attitudes. Subjects were pupils in grades 3, 4, and 5 enrolled in an open space elementary school in an urban neighborhood. Daily contact with an individualized learning-center complex had been provided for two years. The Vocabulary section of the *Iowa Tests of Basic Skills* and the *Piers-Harris Children's Self-Concept Scale* were given as pre- and posttest measures. A semantic differential scale was also administered to assess attitudes towards peers, school, and authority figures. Subjects were divided into three experimental and one control group. Experimentals consisted of: 1) Group A who had completed one year in the program and were continuing; 2) Group B who were entering at the beginning of the study; and 3) Group C who had participated for at least one year before the research but were no longer participating at the beginning of the study. Controls were pupils who had never been participants in the learning complex. Assignment to groups was random. On all three variables scores of pupils who had taken part in the program exceeded controls. On all three variables, Group B showed the greatest gain and Group A showed the next highest gain. Group D pupils showed the smallest gain on the Iowa Vocabulary of all groups as well as the greatest loss on attitude scores.

LUKASEVICH, ANN, & GRAY, ROLAND F. Open space, open education, and pupil performance. *The Elementary School Journal,* November 1978, *79,* 108-114.

Explores the relationship between instructional style (open and non-open programs), architectural style (open and non-open facilities), and selected cognitive and affective outcomes for 321 grade 3 pupils. Instructional program was determined by response to a teacher questionnaire. Based on the questionnaire results, schools were then classified into four groups: 1) three open space schools with open programs, 2) open space schools with non-open programs; 3) three traditionally built schools with open programs; and 4) two traditionally built schools with non-open programs. A total of twenty-four teachers in Vancouver, Canada, were involved in the study. Achievement was assessed by the Vocabulary, Reading Comprehension, Mathematics Concepts, and Problem Solving subtests of the *Canadian Tests of Basic Skills.* In addition, measures of self-concept, intelligence, and socioeconomic status were obtained. When groups were compared on the basis of type of facility, significant differences were found for two of the thirteen dependent variables. Mathematics Concepts favored the group in the non-open facility and self-concept favored the group in open facilities. When groups were compared on the basis of programs, significant differences favoring the non-open group were found for Reading Comprehension and Mathematics Concepts.

McKEON, CHRISTINE A., & McKEON, JOHN W. Automated vs teacher instruction: applying Rowell's attitude scale for reading. *The Reading Teacher,* December 1978, *32,* 302-306.

Assesses the effectiveness of two alternative methods of skill reinforcement with second graders: teacher-oriented as opposed to tape recorded. Subjects consisted of twenty innercity parochial pupils in one classroom. Half of the pupils were randomly placed in the experimental/automated group and half in the control/teacher-oriented group. The study continued for a period of fifteen weeks. Following the experimental period, *Rowell's Attitude Scale for Reading* was given. Significant results favoring the teacher-pupil interaction group were found.

BELL, ANNE E.; ABRAHAMSON, D. S.; & GROWSE, ROSEMARY. Achievement and self-reports of responsibility for achievement in informal (open space) and traditional classrooms. *British Journal of Educational Psychology,* November 1977, *47,* 258-267.

Compares achievement and self-reports of responsibility for achievement among forty beginning fourth graders from traditional and open classrooms. Prior to the children beginning first grade, they were matched on variables including intelligence, visual-motor coordination, visual perception, auditory memory and discrimination, and general school readiness. Achievement measures included the *Schonell Word Recognition Test,* the *Gates-MacGinitie Vocabulary Test,* and the *Cooperative Primary Number Concept Test.* Subjects were also administered the *Intellectual Achievement Responsibility Scale,* a locus of control measure. Multivariate analyses showed that subsequent to the third year in school, subjects from traditional classrooms were superior in reading and math problem-solving but less willing to accept responsibility for negative intellectual events than subjects from an open classroom situation.

V-11 Corrective and remedial instruction

WHITE, MARGARET. A first-grade intervention program for children at risk for reading failure. *Journal of Learning Disabilities,* April 1979, *12,* 231-237.

Tests all entering grade 1 pupils (N=124) in two Catholic schools in Western Australia and presents data on the intervention program given to twenty-one identified as at risk. The program was based on sensory integrative therapy. Children were identified by means of a battery composed of five tests including reciting the letters of the alphabet, the *Peabody Picture Vocabulary Test, Finger Localization,* the *Developmental Test of Visual-Motor Integration,* and a visual-perceptual task. The twenty-one children were assigned to an experimental and control group. Experimentals were given two 30-minute periods of Sensory Integrative Therapy a week for a total of forty-eight treatment periods. At the completion of the therapy program, children were tested on the *Iota Word Test* and were rated on a 3-point scale assessment form for reading competency by teachers. The *St. Lucia Graded Word Reading Test* was given twelve months later and after another year, the St. Lucia and the *Neale Analysis of Reading Ability* Accuracy and Comprehension scales were given. At each testing period, the scores of experimental children were higher than those of controls.

MILES, J.; FOREMAN, P. J.; & IRVINE, J. A comparison of the effectiveness of three remedial reading procedures. *Reading Education,* Autumn 1978, *3,* 27-36.

Compares the effectiveness of three remedial reading procedures with primary age pupils in Australia. Three groups of twenty-eight reading-retarded pupils each were matched for CA, reading age, grade, sex, and IQ. Group 1 was bussed to a center for remedial instruction; Group 2 was given instruction in their own schools by a remedial reading teacher; and Group 3 was given remedial assistance by their classroom teachers. A fourth group of pupils not retarded in reading served as a control. The *Schonell Silent Reading Test A* and the *Gap Reading Comprehension Test* were administered in November-December and again six months later. Pupils were followed for 18 months. At the follow-up, Group 2 children were no longer receiving special aid because the special teachers were transferred to other schools; Group 1 pupils had twelve who had been returned to the regular classroom and fourteen who were still being bussed to the remedial center. All three groups tended to improve about equally, although regular classroom teacher instruction was more effective than specialist intervention. Generally, pupils did not make up lost ground.

RICHARDSON, J., & BROWN, JOAN. A study of three methods of helping children with reading difficulties. *Reading,* July 1978, *12,* 10-21.

Compares three methods of helping children with reading difficulties. In each of the three lower middle class Australian schools involved, the *ACER Primary Reading Survey Tests* were given to third and fourth year pupils. Children who were nine or more months retarded in reading were also given the *St. Lucia Graded Word Reading Test.* Those whose retardation was confirmed by this test and by teacher judgment were randomly assigned to one of four groups: 1) a withdrawal group receiving a daily 40-minute period of special help from a remedial teacher; 2) a parental counselling group where no special instruction was given but where parents received educational counselling; 3) a combined group given both 1 and 2 above; and 4) a control group given help only by the classroom teacher. The St. Lucia and ACER tests were administered again to assess growth. Improvement was found in each of the four groups after five months, after eight months, and again at the end of a year. No significant difference was noted in any school due to the method. The authors suggest that there was a contamination effect in that the project generated interest and discussion within each school, thereby blurring distinctions between groups.

WHYTE, JEAN. Remedial reading: two treatments compared. *Remedial Education,* 1977, *12*(3), 105-112.

Compares the effectiveness of the Frostig program with a language processing program for eighty remedial readers in two Belfast primary schools. The language group listened to interesting stories and discussed them with their teachers. Regular remedial instruction continued along with the two experimental programs for a period of two school terms. The *Burt Word Recognition Test* and the *Frostig Developmental Test of Visual Perception* were given as pre- and posttests. In addition the *Deedside Picture Test* was used as a measure of general ability. Fifteen minutes daily was spent on the experimental programs. No statistically significant differences were found between the two groups, although results favored the language group on the Burt test. Significant differences on the Frostig test were found in favor of the Frostig group. Girls made greater gains than boys in both groups. The average increase on the Burt test for both groups was low.

HOLMAN, JACQUELINE, & BRACKMAN, BARBARA. Choosing the most effective reading method for a mildly retarded child: a data-based technique and a warning. *Reading Education,* Spring 1978, *3,* 37-43.

Presents data on a 9-year-old mildly retarded boy with whom three different methods of teaching words were used to compare their relative effectiveness. The methods used were sight, sign, and multisensory. The multisensory or VAKT method resulted in a more variable acquisition and a poorer retention score than did the other methods. The sight and sign approaches both showed a steady increase in the number of words learned with the sight method producing a superior growth rate.

HOLLINGSWORTH, PAUL M. An experimental approach to the impress method of teaching reading. *The Reading Teacher,* March 1978, *31,* 624-626.

Compares the neurological impress method of teaching reading to more traditional methods with twenty fourth, fifth, and sixth grade students. Subjects ranged in IQ from 79 to 128 on the *Peabody Picture Vocabulary Test* and were administered the *Gates-MacGinitie Reading Test* as a measure of reading achievement gain. Ten subjects were given sixty-two sessions of training with the neurological impress method in a group situation. The EFI Multiple Channel Wireless Language System was used, eliminating the need for the teacher to read with each child individually. Controls continued in the regular program provided. Results indicated that the experimental group achieved one year's growth in reading during the semester compared to .04 year's growth for the control group.

SAMUELS, S. JAY. The method of repeated readings. *The Reading Teacher,* January 1979, *32,* 403-408.

Provides evidence to support use of a method for improving reading fluency and comprehension.

SMITH, JEFFREY K., & KATIMS, MICHAEL. Reading in the city: the Chicago mastery learning reading program. *Phi Delta Kappan,* November 1977, *59,* 199-202.

Describes and presents evaluative data on the Chicago Mastery learning Reading Program (CMLRP). Five classes in one school were engaged in the program for the first year and two classes in each of ten schools participated the following year. In each school, one class was randomly designated as experimental and the other, as control. Final evaluative data for the second year were reported on ten CMLRP classes and eight controls. *The Iowa Tests of Basic Skills,* was administered in the fall of the school year and again fifteen weeks later. The coefficient of correlation between reading gain and September achievement was significantly smaller in the CMLRP classes than in the controls. Thus, achievement was less dependent upon prior ability in the mastery learning classes. In the fifteen week period, CMLRP classrooms went from about one month behind controls to being slightly ahead on Iowa test scores.

KILMANN, PETER R.; HENRY, SUSAN E.; SCARBRO, HAROLD; & LAUGHLIN, JAMES E. The impact of affective education on elementary school underachievers. *Psychology in the Schools,* April 1979, *16,* 217-223

Examines the facilitative effects of affective education and counseling on the academic achievement of sixty-three underachievers in grades 4 through 6. Subjects in the experimental group participated in nine counseling groups that met once a week for fifteen weeks; seventy-seven subjects responded to experimental measures, but received no treatment. The experimental subjects showed a significantly greater increase in reading skills as measured by the *Comprehensive Test of Basic Skills,* and described themselves as more warmhearted, more emotionally stable, more venturesome, and more vigorous after the group experience than did controls.

Hendrickson, Jo; Roberts, Michael; & Shores, Richard E. Antecedent and contingent modeling to teach basic sight vocabulary to learning disabled children. *Journal of Learning Disabilities*, October 1978, *11*, 524-528.

Assesses the differences between two teaching procedures used with two primary-age boys diagnosed as reading disabled. Procedures were contingent modeling (giving the correct response after an error) and antecedent modeling (presenting the correct response prior to the child's response). The two modeling tactics were each used to train each of two different sets of words to each student. The experiment included four phases: baseline, two instructional phases, and a follow-up phase. Both models were found effective in teaching the initial sight word lists, but the antecedent model was more efficient.

Balow, Bruce; Fuchs, Douglas; & Kasbohm, Mary. Teaching nonreaders to read: an evaluation of the basic skill centers in Minneapolis. *Journal of Learning Disabilities,* June/July 1978, *11,* 351-354.

Describes and presents evaluative data on the effectiveness of Basic Skills Centers (BSC), an approach developed to help innercity learning disabled or nonreading pupils achieve functional literacy. The BSC approach is analytic-logical; i.e., reading is taught by analyzing words for recurring visual patterns of letters. Included in the BSC reading program is the use of the language master, worksheets, writing and typing exercises, and a filmstrip with audiotape cassette. For the evaluation, sixty children from two schools who attended the BSC for eighteen or more school days during one academic year were used as subjects. Of these, thirty-four continued for the full year and took both pre- and posttests. These were used as the final sample. They came from grades 3 to 6 and were reading two-and-a-half years below grade level based on the mean scores from two tests, the *Gates-MacGinitie Reading Test* and an informal paragraph reading test. For most children, instruction was five days a week in 30 minute sessions for seven months. Schools were urged not to teach reading to BSC pupils. Pre- and posttest scores on the Gates showed the the thirty-four children gained an average of five months for each month in the program. The informal inventory showed almost a 4-month gain for each month in the program.

Ritter, David R. Surviving in the regular classroom: a follow-up of mainstreamed children with learning disabilities. *Journal of School Psychology,* Fall 1978, *16,* 253-256.

Compares the academic progress of twenty learning disabled children prior to their enrollment in a special learning disability (LD) program, after enrollment in the LD program, and after one year of mainstreaming in a regular classroom. Subjects ranged in age from 8-4 to 12-8. For both LD and mainstreamed classes, reading consisted of a basal series. During the mainstreamed year, additional math and reading instruction was provided three times a week through the school year in 30-minute sessions. The Wide Range

Achievement Test (WRAT) in reading, math, and spelling was used as the measure of academic achievement. During both the LD and mainstreaming year, an approximately 8-month gain was made in reading and math. However, for spelling the LD year showed about an 8-month gain but only a 5-month gain occurred for the mainstreaming year.

RUPLEY, WILLIAM H., & BLAIR, TIMOTHY R. Mainstreaming and reading instruction. *The Reading Teacher,* March 1979, *32,* 762-765.

Discusses some recent investigations on reading instruction and mainstreaming.

WEINER, EVA S. Improvement in reading through writing. *Academic Therapy,* May 1979, *14,* 589-595.

Evaluates the effectiveness of a writing program on the accuracy of oral reading. Major errors (aid, miscalls) and minor errors (repetitions, corrections, unimportant small words) were tabulated during the oral reading of paragraphs graded in difficulty from grade 4 to grade 12. The age and number of students involved are not reported. The average number of major errors is reported to have dropped from six to one and minor errors from fourteen to seven.

RATEKIN, NED. Reading achievement of disabled learners. *Exceptional Children,* March 1979, *45,* 454-458.

Conducts a study to compare oralographic reading instruction for disabled readers with other special reading programs. Subjects were elementary pupils identified as disabled learners in five school districts in three different states. Subjects were given the *Gates-McKillop Reading Diagnostic Tests* and the *Gates-MacGinitie Reading Test.* Random assignment was made to experimental and control treatments. The forty-five experimental pupils used the Oralographic Reading Program which includes a Talking Typewriter or a Talking Page and Voice Recorder. The program includes sixty lessons and the time span for completion ranged from seven months to sixteen months. Each experimental child and a control child were retested on the two reading tests. Significantly higher performance was found for the experimental group.

ALLEN, AMY ROSEMAN, & BORAKS, NANCY. Peer tutoring: putting it to the test. *The Reading Teacher,* December 1978, *32,* 274-278.

Compares a program of peer tutoring, Reciprocal Peer Tutoring (RPT), with direct adult-child tutoring for effectiveness in showing gain in reading scores. Two undergraduate college classes, randomly divided into two groups, were used. One group trained an RPT team while the other group tutored children directly. Each college student was randomly assigned a pair of elementary school (grades 2-5) classmates. One college class worked with innercity children; the other, with predominantly upper middle class children. There were four groups of twelve children each for the total study. College students assigned to the RPT group first taught or reviewed a tutoring behavior and then allowed children to tutor one another for part of a tutoring session. The experiment was conducted for two 50-minute sessions a week for twelve weeks.

The *Slosson Oral Reading Test* (SORT) was given as a pre- and post measure along with informal assessment devices. RPT children showed a greater gain on the SORT than did the adult-tutored group.

EPSTEIN, LEE. The effects of intraclass peer tutoring on the vocabulary development of learning disabled children. *Journal of Learning Disabilities,* October 1978, *11,* 518-521.

Studies the results of an intraclass peer tutoring project carried out with learning disabled children. Five children in each of twenty primary-level learning disability classes who performed poorly on a word recognition test were designated tutors. Tutees were randomly assigned to either peer tutoring in reading or to one of four control conditions: peer tutoring in math, teacher-instructed, self-instructional, or blind control. Tutors and tutees spent fifteen minutes daily on a reading lession in which the tutor followed a 7-step procedure in presenting a word being taught. The peer-tutoring group performed significantly better on a criterion reading test than did the other groups.

MAVROGENES, NANCY A., & GALEN, NANCY D. Cross-age tutoring: why and how. *Journal of Reading,* January 1979, *22,* 344-353.

Provides an overview of research as well as some ideas on how to conduct a tutoring program in reading.

MANNING, DIANE. The reading and math achievement of remedial middle school students taught by teachers versus paraprofessionals. *Reading Improvement,* Spring 1979, *16,* 35-42.

Obtains preliminary data on the effectiveness of teachers as compared to paraprofessionals in improving the reading and math achievement scores of remedial innercity pupils. Subjects were identified on the basis of September pre-test scores on the *Metropolitan Achievement Test,* Form F, given to all grade 5-8 pupils in participating schools. Subjects had to score 1.5 or more years below grade level in grade; 2 or more years below in grade 6; 2.5 or more below in grade 7; and 3 or more years below in grade 8. The reading part of the study involved seven schools with teachers only, seven schools with paraprofessionals only, and four schools with both teachers and paraprofessionals. Subjects were given one-half hour of daily instruction in groups of one to four in reading and/or in math by the paraprofessional or the teacher in addition to regular classroom instruction. In May, an alternate form of the Metropolitan was administered as a posttest. No significant differences were found between groups for either word knowledge or reading. Similar results were obtained for the math scores.

SCHWARTZ, GERALDINE J. College students as contingency managers for adolescents in a program to develop reading skills. *Journal of Applied Behavior Analysis,* Winter 1977, *10,* 645-655.

Designs a study in which forty-two college students were trained as reading tutors and in the use of behavior modification procedures to remediate reading problems in seventh graders. Grade 7 pupils were from four schools. In two of the schools, pairs of pupils were randomly assigned to an experimental or control class. In another school, all pupils were taught developmental reading skills by three teachers trained by the experimenter. However, five classes received behavior-modification procedures, and the other five did not. In the fourth school, college tutors met pupils for one hour weekly but no systematic skill training or behavior-management procedures were employed. Programs were carried out over a 10-week period. The *Gates-MacGinitie Reading Test,* Survey E, was administered as a pre- and posttest. A signficant growth was found for all groups, but the experimental groups showed significantly greater increases in reading compared to controls. In a follow-up study six months later, grade scores continued to show improvement and experimentals remained significantly ahead of controls.

POTTS, MARION, & LEYMAN, LARETHA. Intervention in the motor domain: training study with first- and second-grade slow readers. *Psychology in the Schools,* April 1977, *14,* 200-206.

Views the comparative effectiveness of motor, perceptual, and academic training programs with thirty-five first and second grade children designated as poor readers. Subjects were identified as poor readers by teachers and also were screened on the *Gates Primary Reading Test* and all motor subtests of the *Purdue Perceptual Motor Survey.* Random assignment was made to one of three treatment groups: Motor Training, Physical Education, and Reading Control. The Motor Training group received the Kephart program; the Physical Education group received traditional physical education activities; and the Control group was given supplementary reading dealing with word and sound identification, storytelling, and free reading. The experimental groups met three times weekly for 30 minutes each over a 12-week period. An alternate form of the Gates was used as the criterion measure of reading. Analysis of variance and analysis of covariance techniques showed no significant differences among the three groups on reading achievement. The Physical Education group, however, showed the least amount of gain.

HAGIN, ROSA A.; SILVER, ARCHIE A.; & BEECHER, RONNIE. Scanning, diagnosis, and intervention in the prevention of reading disabilities: II. TEACH: learning tasks for the prevention of learning disabilities. *Journal of Learning Disabilities,* August/September 1978, *11,* 445-449.

Describes an intervention program based on the SEARCH and TEACH program and presents evaluative data. TEACH is a prescriptive program designed to prevent learning problems in primary-grade children by building neuropsychological skills. Results of the program have been evaluated in four ways. First, scores on measures of perception and reading were compared for 126 children who had been assigned to intervention and control conditions. The reading tests utilized were the *Wide Range Achievement Test* and the *Woodcock Reading Mastery Test:* word identification and word attack-phonics sections. At the end of grade 1, the intervention group earned significantly higher scores than controls on perception measures, oral reading, word identification, and word attack-phonics. A second form of evaluation was the use of a norm-referenced test with ninety-five children from the intervention group who completed grade 3. Significant differences between actual and expected scores were found at the end of grades 1, 2, and 3. A third evaluation was a behavioral follow-up of sixteen intervention children and nineteen normal-progress classmates at the end of grade 4. Of the thirteen variables studied, the intervention group was not distinguishable from the normal progress group on eleven of them. A cross-validation was done with children in another city with similar positive results.

AYRES, A. JEAN. Learning disabilities and the vestibular system. *Journal of Learning Disabilities,* January 1978, *11,* 18-29.

Assesses the effect of an experimental treatment program on a variety of abilities with ninety-two learning disabled children, ages 6 to 10. All children were administered a pre-program battery of tactile, kinesthetic, visual, vestibular, auditory, language, motor, and laterality tests. In addition, an intelligence test (WISC or Binet), the *Wide Range Achievement Test* (WRAT), and the Slosson Oral Reading Test (SORT) were administered. The experimental group was given six months of therapy stressing vestibular, tactile, and proprioceptive stimulation and activation. Controls received the equivalent in time of special education classroom experience. Posttesting one year later included the WRAT and the SORT and revealed that a larger number of experimental children than control children with hyporeactive nystagmus made greater academic gains.

HAUPT, EDWARD J.; COBEN, MARLA; MAGEE, JOHN W.; AXELROD, SAUL; & PRICE, MARIANNE. Rapid reduction of graphically similar substitution errors in oral reading with a drill procedure. *Journal of Educational Research,* November/December 1977, *71,* 114-116.

Gives three boys, ranging in age from 8 to 12, special oral reading word pair drill requiring the differentiation between two final phonemes and assesses the carryover to other oral reading. Two of the three boys came from a special class, and one was in a self-contained grade 4 classroom. Each day subjects read one story of at least 150 words in length while the experimenter categorized errors into one of five categories: reversals, omissions, insertions, graphically similar substitutions, and other substitutions. The drill requiring subjects to read pairs of words followed immediately and continued until at least nineteen of the twenty pairs presented were correctly read. After completion of the drill, each child read from his book again. Results were reported for graphically similar substitutions and all other errors only. The drill procedure produced decreases for both classes of errors in all three pupils. While there was an increase in graphically similar substitution errors when the drills stopped, there was little change in the percentage of all other errors.

HAGGARD, MARTHA RAPP. The effect of creative thinking-reading activities (CT-RA) on reading comprehension. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice.

Twenty-seventh Yearbook of the National Reading Conference, 1978. 233-236.

Purports to examine the effect of training in creative thinking on reading achievement. Subjects were thirty-three students, ages 7 to 18, enrolled in a summer reading clinic. Subjects and their tutors were randomly assigned to one of three groups: 1) creative thinking-reading activities (CT-RA); 2) experimental control (EC) in which remedial game activities were used; and 3) control (C) where subjects received regular remedial instruction. The experiment was conducted over a 5-week period with three days in the first and last weeks devoted to testing. Data collected included WISC or WAIS scores, the *Torrance Tests of Creative Thinking,* and the *Classroom Reading Inventory* (CRI). Alternate forms of the CRI were used as pre- and posttest assessments of comprehension. Mean reading pretest scores of 4.7, 6.4, and 4.5 were obtained by the CT-RA, EC, and C groups, respectively. Adjusted mean posttest scores for the three groups were 6.4, 5.4, and 6.0, respectively. A statistically significant difference was found between the CT-RA and EC groups. No other significant differences were noted.

HIRST, LOIS T., & O'SUCH, TWILA. Using musical television commercials to teach reading. *Teaching Exceptional Children,* Winter 1979, *11,* 80-81.

Initiates and evaluates a program of teaching reading to 8 to 10-year-old Appalachian children through the use of musical television commercials. Children identified their favorite commercials, which were subsequently taped directly from the television set. In Phase 1 of the program, taped songs were played at the beginning of a reading lesson while children were encouraged to sing along and to pantomime the activity suggested. In Phase 2, children followed the words on the chalkboard as they sang along with the tape. The third phase eliminated the tape. Various skill-oriented activities were utilized to give practice with the words. The program was conducted over the last three months of the school year. Pre- and posttest scores on the reading section of the *Wide Range Achievement Test* (WRAT) showed an average gain of 12.3 months during the year for the thirty-nine subjects.

DOYLE, ROBERT E.; GOTTLIEB, BERNARD; & SCHNEIDER, DONALD. Underachievers achieve—a case for intensive counseling. *The School Counselor,* January 1979, *26,* 134-143.

Posits the notion that an intensive counseling program could influence the academic performance of low-achieving secondary students. Subjects were selected from among disadvantaged high school students who were functioning several years below grade level in reading and mathematics and who were enrolled in special remedial programs in thirty-two New York City high schools. The intensive program consisted of a minimum of ten small group counseling sessions or twelve individual sessions. Of the 2,873 students in the program, 830 who were in remedial reading had been in the same academic remediation program the semester or year before receiving intensive counseling. This group served as their own comparison group using pre- and posttest scores. A total of 310 remedial reading students received counseling over a full year, and 520 were treated for one semester only. The *Metropolitan Achievement Test* was the criterion measure. Subjects who received intensive counseling showed significant gains in their reading scores when they were counseled for one year and in the first two years of high school when counseled for one semester.

Moyer, Sandra B. Rehabilitation of alexia: a case study. *Cortex,* March 1979, *15,* 139-144.

Describes the use of a technique labeled Multiple Oral Rereading (MOR) in remediating a case of acquired alexia in a 30-year-old adult male. The subject's reading ability was impaired following surgery, and the MOR procedure began sixteen months post-operatively. It was conducted over twelve one-and-one-half hour weekly sessions. The procedure involved repeated oral reading of connected discourse. Rate increased from an initial 66 syllables per minute (spm) to 94 spm. Average reading speed on the *Gray Oral Reading Test* went from 76 spm in May to 114 spm in December.

Bergman, Irwin B. College students in reading and study skills courses: how should they be graded? *College Student Journal,* Summer 1978, *12,* 140-143.

Suggests that some recent literature indicates that students who are required to take remedial classes in areas such as reading and study skills may be more highly motivated and will perform better academically if they receive traditional letter grades rather than a pass or fail mark.

Connallon, Peter F., Jr. Reading in the elementary school. In Harold G. Shane & James Walden (Coordinators) *Classroom-relevant research in the language arts.* Washington, D. C.: Association for Supervision and Curriculum Development, 1978. 73-84.

Focuses on elementary school reading research that promises to be of most value to the classroom teacher.

Pritchard, Allyn, & Taylor, Jean. Suggestopedia for the disadvantaged reader. *Academic Therapy,* Septemb 978, *14,* 81-90.

Investigates the utility of an instructional method in raising reading scores for seventeen remedial readers, ages 8 to 13. Students in the study were one year below grade level on the silent reading subtest of the *Spache Diagnostic Reading Scales.* The experimental method employed centered around presenting lesson material in both attentive and non-attentive states (alternating levels of awareness) and creating a relaxed, non-defensive atmosphere where distractions were minimized. The experimental approach also emphasized the use of visual imagery. Specific reading skill instruction was administered during the 14-week experimental period. Fourteen subjects showed a gain of one or more years in oral and silent reading; nine showed a gain of a year or more in word recognition. Gain scores in oral and silent reading were double those of subjects in more traditional programs.

V-12 Teaching—bilingual

GÁMEZ, GLORIA I. Reading in a second language: "native language approach" vs "direct method." *The Reading Teacher,* March 1979, *32,* 665-670.

Examines the literature on teaching reading in a second language. Suggests there is more support for the native language approach versus the direct method, although there are several variables that affect the success of either method.

GENESEE, FRED. Acquisition of reading skills in immersion programs. *Foreign Language Annals,* February 1979, *12,* 71-77.

Reviews research on the acquisition of reading skills (in the first and second languages) by children in primary grade level programs receiving all or part of the instruction in a second language.

Linguistic Reporter, The. Title VII a failure? Some experts disagree. September 1978, *21,* 4 & 10.

Reports criticism of a nationwide survey of bilingual education programs in the United States which concluded that Spanish-English bilingual programs "did not appear to produce gains in student achievement over and above what would be expected . . . (in) a traditional classroom."

DEAN, RAYMOND S. Analysis of the PIAT with Anglo and Mexican-American children. *Journal of School Psychology,* Winter 1978, *15,* 329-333.

Analyzes the usefulness of the *Peabody Individual Achievement Test* (PIAT) when administered to separate samples of Anglo and Mexican-American children (n = 62). The *Wide Range Achievement Test* (WRAT) and the *Wechsler Intelligence Scale for Children* (WISC-R) were used as comparative measures. All subjects had been referred for psychological evaluation because of learning difficulties. Subjects were matched on the basis of sex, age, socioeconomic status, educational placement, and reason referred for psychological assessment. Partial intercorrelations, with chronological age held constant, among the PIAT subtest raw scores and subtests of the WRAT measuring the same construct were performed. Adequate concurrent validity was revealed for the PIAT Mathematics, Spelling, and Reading Recognition subtests for both groups of children. Analysis of subtest means and concurrent validity between ethnic groups showed general equivalence with the exception of WISC-R Verbal IQ means. Implications for the assessment of Mexican-American children are discussed.

WAINMAN, H. Cloze testing of second language learners. *English Language Teaching,* January 1979, *33,* 126-132.

Assesses two different types of cloze deletions with second language learners in Swaziland. A short story of 1,142 words was used for the material. In the first part of the passage, forty content words were deleted. At about the midpoint of the passage, a normal cloze procedure was instituted with every tenth word deleted, regardless of syntactic role. The cloze material was presented to seven final-year secondary classes and one group of first-year undergraduates. The total number participating in the study was 205. No significant differences were noted between the scores on the two halves of the passage. Two months after the cloze test was taken, teachers in three of the groups were asked to rank their students on reading comprehension and writing ability. Correlation coefficients between cloze test scores and teacher rankings for reading comprehension ran from .659 to .736.

CONNOR, ULLA, & READ, CHARLES. Passage dependency in ESL reading comprehension tests. *Language Learning,* June 1978, *28,* 149-157.

Measures passage dependency on the reading comprehension section of the *Michigan Test of English Language Proficiency.* Subjects were thirty foreign students and thirty native speakers of English, all enrolled in graduate or undergraduate classes. Half of the subjects received test booklets with the reading passages intact, and half received the booklets without the passages. Subjects who had the intact passages scored higher than did the other group. In the passage-omitted condition, only native English speakers scored higher than chance.

V-13 Tests and testing

Because there are a number of different types of research reports in this subcategory, the entries have been further subdivided. Thus, the reader will find sections on test-taking behavior, predictive studies, cloze tests, test development, and validity reports.

V-13 a. Test-taking performance

JONGSMA, EUGENE A., POUND, RONALD E.; & TIPS, MARTHA L. The effects of instruction in testwiseness in a college reading improvement course. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978. 237-241.

Notes the effects of teaching selected aspects of testwiseness to students enrolled in a college reading improvement course. There were an experimental and a control group of twenty-nine students each. The experimental group received a self-instructional booklet which included six testwiseness strategies. Alternate forms of a 30-item experimenter-developed test were administered as pre- and posttests to assess the effect of instruction. Using the *Nelson-Denny Reading Test* scores as a covariate, a significant difference favoring the posttest means of the experimental group was found. There appeared to be little relationship between reading ability and testwiseness.

KEETZ, MARY A. A replication using the Davis reading test. *Reading Improvement,* Summer 1978, *15,* 119-121.

Replicates an earlier study of the role of testwiseness and studies the passage dependency of the *Davis Reading Test.* A randomly selected sample of 103 college freshmen of average verbal aptitude (Scholastic Aptitude Test) were administered a passageless test consisting of the first twenty-seven comprehension items on the Davis test. The same form of the test was then given with the passages intact. Passageless scores were significantly better than chance. A correlation of .32 was found between the two scores on the test. Results were compared with two previous studies. The author concluded that verbal aptitude may be a factor affecting degree of testwiseness and may vary with the test administered.

JACKSON, PETER F. Answer changing on objective tests. *Journal of Educational Research,* July/August 1978, *71,* 313-315.

Attempts to identify some of the causes of answer changing behavior on tests. Subjects were drawn at random from a representative sample of New Zealand school children who participated in the standardization of the *Progressive Achievement Tests: Study Skills.* Included were 379 ten-year-olds, 371 twelve-year-olds, and 346 fourteen-year-olds. The number of answer changes per item was compared with the position of each item in a group of items, the position of each item in the test, the discrimination index, and the difficulty index of each item. Answer changes occurred most frequently on items occurring early in a group of items and toward the end of the test. A tendency was noted for difficult items and items with poor discrimination to be changed more frequently.

BLAIR, TIMOTHY R., & RATHS, JAMES D. Reading comprehension as making "unreasonable" inferences. *Journal of Educational Research,* September October 1978, *72,* 29-31.

Classifies reading comprehension test items into three categories and ascertains the extent to which 102 grade 5 and 6 pupils perform differently on the three classifications. The *New Developmental Reading Tests for the Intermediate Grades* was administered to children. Test items were categorized as recall, low inference, and high inference. Using analysis of variance procedures, mean percentage correct scores were compared across categories. For recall, the mean percent correct was 60; for low inference and high inference, the mean percent correct was 51 and 48, respectively. A significant difference was found between scores on recall and the two inference categories. No significant differences were identified between the scores on the high and low inference categories.

MCPHAIL, IRVING P. Test sophistication: an important consideration in judging the standardized test performance of black students. *Reading World,* March 1979, *18,* 227-235.

Contends that testwiseness knowledge is not equally distributed among the population and that an acute deficiency in test-taking ability would vitiate the contributory value of any standardized test result. Some research using reading tests is cited.

V-13 b. Predictive studies

MESSÉ, LAWRENCE A.; CRANO, WILLIAM D.; MESSÉ, SUSAN R.; & RICE, WILLIAM. Evaluation of the predictive validity of tests of mental ability for classroom performance in elementary grades. *Journal of Educational Psychology,* April 1979, *71,* 233-241.

Studies the predictive validity of a longitudinal series of mental ability tests for classroom performance of a large sample of British elementary school age children. The data used had been collected on a sample of about 5,200 children over a 4-year period and reported previously. Mental ability was assessed by means of a test developed by the National Foundation for Educational Research (NFER) in England and Wales. Additional data collected included socioeconomic status, teacher evaluations of children's academic performance, and reading and arithmetic grade point average (GPA). The coefficient of correlation between GPA and 3-year mean mental ability tended to be about .5 for all socioeconomic levels at each of grades 2, 3, and 4.

WHITE, DONNA ROMANO, & JACOBS, ELLEN. The prediction of first-grade reading achievement from WPPSI scores of preschool children. *Psychology in the Schools,* April 1979, *16,* 189-192.

Measures the relationship between the *Wechsler Preschool and Primary Scale of Intelligence* (WPPSI) IQs and reading achievement test scores. Both Full Scale and subtest scaled scores were used. A total of sixty-eight nursery school children were given the WPPSI. Three years later, twenty-eight of these children were followed up in grade 1 and given the *Gray Oral Reading Test.* Pearson product-moment correlations between the Gray Oral and the Verbal IQ, Performance IQ, and Full Scale IQ were .54, .51, and .58, respectively. Scaled subtest coefficients with the Gray Oral ranged from .23 (Mazes) to .61 (Geometric Design).

HARTLAGE, LAWRENCE C., & STEELE, CAROL T. WISC and WISC-R correlates of academic achievement. *Psychology in the Schools,* January 1977, *14,* 15-18.

Correlates WISC and WISC-R scores with achievement test scores and school grades of thirty-six children, mean age 7-9. *Wide Range Achievement Test* (WRAT) scores on arithmetic, reading, and spelling were collected at the end of grade 2 and grades in four content areas (reading, arithmetic, writing, and social studies) were collected in first and second grade. Correlation coefficients between the WISC Full Scale, Verbal, and Performance scores and the WRAT Reading scores were .586, .606, and .648, respectively. For the WISC-R, the coefficients with WRAT Reading were .681, .752, and .540, respectively.

REYNOLDS, CECIL R., & HARTLAGE, LAWRENCE. Comparison of WISC and WISC-R regression lines for academic prediction with black and with white referred children. *Journal of Consulting and Clinical Psychology,* June 1979, *47,* 589-591.

Collects data to aid in the evaluation of the WISC and the WISC-R as predictive measures for scores on the *Wide Range Achievement Test* (WRAT). A separate analysis was made for Black and for White children. The sample consisted of thirty White and thirty-six Black children referred for psychological evaluation. All subjects were given the WISC and WISC-R in a counterbalanced design. The WRAT Reading and Arithmetic subtests were also administered. Pearson correlations between the full scale IQs and the two WRAT subtests were computed for the total sample and by race. Regression lines for each pair of scores were then examined. Regression lines did not differ significantly by race for the prediction of WRAT scores by either the WISC or the WISC-R.

SCHWARTING, F. GENE, & SCHWARTING, KATHLEEN R. The relationship of the WISC-R and WRAT: a study based upon a selected population. *Psychology in the Schools,* October 1977, *14,* 431-433.

Investigates the relationship between WISC-R IQs and achievement scores on the Reading, Spelling, and Arithmetic subtests of the *Wide Range Achievement Test* (WRAT). A total of 282 subjects, ages 6-16, who had been referred for psychological examination, were administered the WISC-R and WRAT tests. Coefficients of .72, .65, and .75 were found between full scale WISC-R IQs and WRAT Reading, Spelling, and Arithmetic scores, respectively, at ages 6-11. For ages 12-16, the coefficients were .62, .56, and .66, respectively.

BROOKS, CLARENCE RAE. WISC, WISC-R, S-B L&M, WRAT: relationships and trends among children ages six to ten referred for psychological evaluation. *Psychology in the Schools,* January 1977, *14,* 30-33.

Looks at the relationships among the WISC, WISC-R *Stanford-Binet* (S-B), and the *Wide Range Achievement Test* (WRAT) scores in reading, spelling, and arithmetic. Subjects were thirty children, ages 6 to 10, referred for psychological evaluation. Generally the S-B, WISC, and WISC-R full scale scores predicted overall achievement in a significant manner. Computations suggested that children referred for evaluation would tend to score 6 to 12 points lower on the S-B than on the WISC and 3 to 11 points lower on the WISC-R than on the WISC.

HALE, ROBERT L.; DOUGLAS, BARBARA; CUMMINS, ANN; RITTGARN, GWEN; BREED, BECKY; & DABBERT, DEBBIE. The Slosson as a predictor of Wide Range Achievement Test performance. *Psychology in the Schools,* October 1978, *15,* 507-509.

Investigates the efficacy of the *Slosson Intelligence Test for Children and Adults* (SIT) for predicting academic achievement. A total of thirty-one girls and sixty-four boys were randomly selected from a population referred for psychological evaluation to serve as subjects. The age range was from 5 to 19 with grade levels K to 12 represented. Sample size per grade ranged from two in grades 10 and 12 to fourteen in grade 7. In addition to the SIT, subjects were given the Reading, Spelling, and Arithmetic subtests of the *Wide Range Achievement Test* (WRAT). The Pearson product moment correlation coefficients of the SIT with WRAT Reading, Spelling, and Arithmetic scores were .6064, .5660, and .6310, respectively. Derived regression equations were presented.

HALE, ROBERT L. The WISC-R as a predictor of WRAT performance. *Psychology in the Schools,* April 1978, *15,* 172-175.

Investigates the efficacy of predicting performance on the *Wide Range Achievement Test* (WRAT) by using the Verbal and Performance scores of the WISC-R as predictors. The tests were given to 155 children, ages 6 to 16, who had been referred for psychological evaluations. A multiple regression analysis was used in which Verbal and Performance IQs were held as conjoint predictors and were regressed on the WRAT Reading, Spelling, and Arithmetic scores. Verbal IQ correlated .5361 with WRAT Reading scores, while Performance IQ correlated only .291 with WRAT Reading. Regression equations for predicting Reading and Math scores were presented.

SATZ, PAUL, & FLETCHER, JACK M. Early screening tests: some uses and abuses. *Journal of Learning Disabilities,* January 1979, *12,* 56-60.

Concerns itself with the problem of determining predictive outcomes in early detection research. The authors review the findings of a previous study concerned with early detection problems and reanalyzes the data. Some abuses of early screening devices are detailed.

WELLS, M. GAWAIN, & PETERSON, GEORGE V. Kindergarten behavior rating as predictor of first-grade achievement. *Journal of Learning Disabilities,* June/July 1978, *11,* 344-347.

Evaluates the use of the *Kindergarten Teachers' Checklist for Screening Potential Learning Problems* (KTC) as a screening device for identifying potential first-grade learning problems. Subjects were 111 kindergarten children who were followed through the end of grade 1. The four kindergarten teachers involved filled out the KTC on each child in the spring. As a reliability check, the KTC was filled out again two weeks later on one-fifth of the children in each class. At the end of grade 1, first grade teachers also filled out the KTC and completed the *Devereux Elementary School Behavior Rating Scale* (DESB) as a test of concurrent validity. Criterion validity of the KTC was assessed by means of the *Iowa Tests of Basic Skills* (ITBS) Primary Battery, Level 7. Both kindergarten and first grade scores on the KTC were correlated with the eight subtest scores obtained on the ITBS. The KTC compared favorably with the DESB in predicting grade 1 achievement, but both test scores were only modest predictors of ITBS scores and accounted for less than 30 percent of the variability in subjects on the ITBS.

KLEIN, ALICE E. The validity of the Beery test of visual-motor integration in predicting achievement in kindergarten, first, and second grades. *Educational and Psychological Measurement,* Summer 1978, *38,* 457-461.

Provides reliability and predictive data on the *Visual-Motor Integration Test* (VMI). Subjects consisted of three groups of pre-kindergarten pupils. All groups received the VMI during the last month of the preschool program. The *Screening Test of Academic Readiness* (STAR) was given to all three groups during the first month of kindergarten, and the *Stanford Early Achievement Test* (SESAT) was given to groups 1 and 2 during the first month of grade 1. The *Stanford Achievement Test* (SAT) was given during the first month of grade 2. Correlation coefficients between the VMI and STAR ranged from .102 to .595; with the SESAT, VMI coefficients ranged from .271 to .498. VMI-SAT coefficients ranged from .251 to .402. The VMI was most predictive of STAR Total and Numbers scores, SESAT Mathematics and Word Reading scores, and SAT Total Mathematics scores. Test-retest reliability for one sample over seven months was .630.

LESIAK, JUDI. The Gates-MacGinitie Readiness Skills Test and Illinois Test of Psycholinguistic Abilities as predictors of first-grade reading. *Psychology in the Schools,* January 1977, *14,* 4-10.

Studies the relative efficacy of two tests for predicting reading achievement and also determines if the tests differentially predict reading success in alternative approaches to reading. Subjects were fifty-three first-grade pupils randomly selected from four classrooms, two using i.t.a. and two using t.o. The *Gates-MacGinitie Reading Tests: Readiness Skills* (G-M), the *Cognitive Abilities Test,* Primary I, and the *Illinois Test of Psycholinguistic Abilities* (ITPA) were administered early in the first grade year. The *Lee-Clark Reading Tests, First Reader,* was given in May of first grade. The G-M was found to be a better predictor of reading than the ITPA for both i.t.a. and t.o. groups.

MARGOLIS, HOWARD. The kindergarten auditory screening test as a predictor of reading disability. *Psychology in the Schools,* October 1976, *13,* 399-403.

Examines the relationship between the *Kindergarten Auditory Screening Test* (KAST), the *Metropolitan Readiness Test* (MRT), and the *Gates-MacGinitie Reading Tests* (GMRT). The KAST and MRT were administered toward the end of the kindergarten year; the GMRT was given in February of grade 1. In addition, the *Peabody Picture Vocabulary Test* and the *Columbia Mental Maturity Scale* were given in kindergarten. The KAST accounted for 9 percent of MRT variance. It did not correlate significantly with any score on the GMRT. It was concluded that the KAST was not an effective predictor of reading disability.

SCHNEIDER, MICHAEL A., & SPIVACK, GEORGE. An investigative study of the Bender-Gestalt: clinical validation of its use with a reading disabled population. *Journal of Clinical Psychology,* April 1979, *35,* 346-351.

Explores the use of the *Bender-Gestalt Visual Motor Test* as a means of differentiating between primary and secondary reading disability. Subjects were fifty children, ages 8-6 to 10-7, referred to a clinic because of learning problems. Subjects were at least two years below expected reading level on the *Temple University Informal Reading Inventory* and ranged between 80 to 124 on the basis of WISC IQs. A primary reading disabled group showing signs of neurological dysfunction and a secondary reading disabled group showing no specific signs of neurological dysfunction were identified. The Bender-Gestalt was individually administered and analyzed for children in each group. The two groups did not differ significantly on the basis of total developmental scores on the Bender-Gestalt. Further analysis showed that seven of the Bender-Gestalt signs differentiated between the primary and secondary reading disability groups. The analysis also revealed that the primary reading disability group was significantly more retarded in reading than the secondary group but the Bender-Gestalt scores were not significantly related to reading level.

COLLIGAN, ROBERT C. Predictive utility of the Myklebust pupil rating scale: a two-year follow-up. *Journal of Learning Disabilities,* April 1979, *12,* 264-267.

Conducts a study to determine concurrent and predictive validity of the Myklebust *Pupil Rating Scale* (PRS) for readiness and reading achievement. Four kindergarten teachers completed the PRS for their sixty-seven pupils who were also given the *Lippincott Reading Readiness Test,* the *Metropolitan Readiness Test,* and Level 1 of the *Wide Range Achievement Test.* Correlation coefficients ranging from .63 to .77 were found between the PRS and the various readiness measures. At the end of grade 2, fifty-five of the original kindergarten group were followed up and given the Word Meaning, Paragraph Meaning, Word-Study Skills, and Arithmetic Computation sections of the *Stanford Achievement Test.* The fifty-five subjects were classified into one of four categories based on the amount of reading difficulty they had encountered. Under the scheme, thirty-two children were classified as having no difficulty in reading; six as having mild difficulty; twelve, moderate; and five, severe difficulty. A correlational analysis yielded coefficients between .53 to .72 between the PRS and criterion measures. PRS Auditory comprehension was most highly correlated with measures of reading capability.

MILLER, WILLIAM H. A comparison of the Wide Range Achievement Test and the Peabody Individual Achievement Test for educationally handicapped children. *Journal of Learning Disabilities,* January 1979, *12,* 65-68.

Investigates the *Wide Range Achievement Test* (WRAT) and the *Peabody Individual Achievement Test* (PIAT) as screening devices for educationally handicapped children. Subjects were twenty-seven children, ages 3-11 to 7-6, enrolled in a private school for the educationally handicapped. Both the WRAT and PIAT were administered. The PIAT total test score appeared to be a global measure with no discriminating function. All WRAT subtests correlated highly with one another. The results did not support the use of either the WRAT or the PIAT as having specific content validity for educationally handicapped children. Both tests had specific strengths and weaknesses as screening devices.

ROETTGER, DORIS; SZYMCZUK, MIKE; & MILLARD, JOSEPH. Validation of a reading attitude scale for elementary students and an investigation of the relationship between attitude and achievement. *The Journal of Educational Research,* January/February 1979, *72,* 138-142.

Simplifies the *Estes Attitude Scale Toward Reading* and studies the relationship between attitude and reading achievement. Subjects totalled 697 pupils in grades 3 through 6. Teachers rated pupils on a 5-point scale on their liking for reading prior to administering the modified attitude scale. Pupils were also asked to rate themselves on a 3-point self-rating scale of attitude toward reading. The Vocabulary and Comprehension scores on the *Iowa Tests of Basic Skills* were used as the measure of reading achievement. Pearson product moment correlation coefficients between the modified scale and teachers' ratings of pupils ranged from .27 to [illegible] for the grade level involved; for pupils self-ratings, the coefficients ranged from .29 to .63 (at grade 5 level). The coefficient between the modified scale and Reading Comprehension scores was .317 and for Vocabulary, it was .315. The split-half reliability estimate for the modified scale was .52.

CARPENTER, DALE & CARPENTER, SUE. The concurrent validity of the Larsen-Hammill Test of Written Spelling in relation to the California Achievement Test. *Educational and Psychological Measurement,* Winter 1978, *38,* 1201-1205.

Computes a correlation matrix and does a stepwise multiple regression analysis to determine concurrent validity of the *Larsen-Hammill Test of Written Spelling* (TWS). The TWS was administered to forty-five grade 4 pupils in December. In April of grade 3, they were given the Reading, Mathematics, Language, and Spelling subtests of the *California Achievement Test.* TWS scores were divided into predictable and unpredictable word scores. Coefficients of TWS scores with the CAT variables ranged from .20 to .38. With CAT reading, the correlation coefficients were .32 for predictable words and .26 for unpredictable words. The multiple coefficient of .384 between the CAT Language score and the weighted combination of predictable and unpredictable words accounted for approximately 15 percent of the explained variance in Language and was the only significant multiple correlation. TWS scores were not valid predictors of CAT scores.

RANDEL, MILDRED A.; FRY, MAURINE A.; & RALLS, ELIZABETH M. Two readiness measures as predictors of first- and third-grade reading achievement. *Psychology in the Schools,* January 1977, *14,* 37-40.

Compares the predictive effectiveness for grade 1 and grade 3 reading achievement of the *ABC Inventory* and the *Metropolitan Readiness Test* (MRT). A total of sixty-five children took the two predictive tests and were available for intelligence testing and the *Stanford Achievement Test,* Primary II, (SAT) in grade 3. Data on the predictive tests, intelligence, and the SAT, Primary I, in first grade were available for sixty-two children. Using multiple-regression procedures, it was found that performance on the MRT accounted for 11 percent of the variance in grade 1 reading scores. In predicting grade 3 reading, the MRT accounted for 26 percent of the variance and IQ accounted for an additional 6 percent. No other predictors made a significant contribution to grade 1 or grade 3 reading achievement.

MODJESKI, RICHARD B., & MICHAEL, WILLIAM B. The relationship of the general educational performance index measure to other indicators of educational development in each of three samples from an United States Army population. *Educational and Psychological Measurement,* Summer 1978, *38,* 377-391.

Ascertains the relationship between scores on each of five subtests as well as composite scores on the General Education Performance Index (GEPI) and scores on other achievement and experimental measures. Subjects were three samples (N = 223, 124, and 54) of military personnel of different ability levels. For two of the samples, the *General Education Development* (GED) test battery was given and a regression equation devised to predict the GED mean score from the GEPI mean score. Included among the tests given to one or another of the 3 groups was the *Nelson Reading Test* (NRT) and the *Comprehensive Tests of Basic Skills* (CTBS). Composite scores on the GED could be predicted with relative accuracy from GEPI composite (r = .52 to .70). Subtests in Reading and Language on the CTBS correlated between .40 and .68 with composite scores on the GED and GEPI batteries. However, the relationship between scores on the NRT and the two batteries were minimal.

BURROWS, EVELYN HONOR, & NEYLAND, DELLA. Reading skills, auditory comprehension of language, and academic achievement. *Journal of Speech and Hearing Disorders,* November 1978, *43,* 467-472.

Correlates scores of twenty kindergarteners (age 5.5 to 6.5) on the *Gates-MacGinitie Readiness Test, Stanford Early School Achievement Test, Peabody Picture Vocabulary Test, Test of Auditory Comprehension of Language,* and the *GFW Diagnostic Auditory Discrimination Test.* Moderately high positive Spearman rank order intercorrelation coefficients (.67 to .89), significant at the .01 level, were found between measures.

V-13 c. Cloze testing and usage

BRADLEY, JOHN M.; ACKERMAN, GARY; & AMES, WILBUR S. The reliability of the maze procedure. *Journal of Reading Behavior*, Fall, 1978, *10*, 291-296.

Investigates whether maze tests constructed over the same passages by different teachers are comparable and also studies the reliability of parallel forms of the maze test. Twenty-two teachers each prepared two maze tests based on two 140-word passages from a second grade basal reader. Three randomly selected sets of maze tests were then used with 246 grade 2 pupils. Subjects completed two maze forms one for each passage. Maze forms on one passage were comparable, but on the other passage, the maze forms of two teachers were not comparable. Reliability coefficients between the forms ranged from .62 to .92. Inspection of the one maze passage form found not to be reliable, congruent, or comparable indicated that directions for maze test construction had not been followed.

Panackal, Abraham A., & Heft, Carl S. Cloze technique and multiple choice technique: reliability and validity. *Educational and Psychological Measurement,* Winter 1978, *38,* 917-932.

Compares the reliabilities and validities of two cloze tests with two multiple choice tests developed from the cloze forms. In addition, the study compared two types of tests scored with original scoring keys and empirically derived scoring keys and investigated the effects of scoring responses with the option weighting of items. Instruments used included two cloze tests, two multiple choice tests, and the *Cooperative English Test.* College admission records were used to obtain *Scholastic Aptitude Test* (SAT) scores and High School Decile (HSD). The cloze tests consisted of two passages of 285 and 289 words from a freshman history text. The tests were given to two samples of 529 and 559 undergraduates. Multiple choice tests were developed from the most frequent responses to the cloze tests and given to samples of 420 and 127 subjects. The multiple choice tests were then scored and item-analyzed with original keys, empirical keys, and empirical keys with option weighting. Correlation coefficients were then calculated between different scales and SAT scores, Cooperative English scores, and HSD. The results suggested that there was a trend for the empirical key scales to be more reliable and valid than the other scales across different forms and samples. The multiple choice forms appeared to be less reliable but more valid than the cloze forms.

O'Reilly, Robert P., & Streeter, Ronald E. Report on the development and validation of a system for measuring literal comprehension in a multiple-choice cloze format: preliminary factor analytic results. *Journal of Reading Behavior,* Spring 1977, *9,* 45-69.

Summarizes the results of a series of factor analyses of a test of literal comprehension using a multiple-choice cloze format; test data were collected from a sample of 3,125 students in grades 1-6. Additional measures administered to the sample included an alternate measure of literal comprehension, a measure of passage independence, the *Short Form Test of Academic Aptitude,* and the *California Achievement Test.* Scores from the literal comprehension cloze test were analyzed independent of IQ in order to determine the extent to which literal comprehension was independent of IQ and the loadings literal comprehension has on other language skills. The experimental test being validated in the present study was found to measure literal comprehension; it was also determined that the experimental cloze test had minor loadings on a second, and possibly a third component related to IQ, inferential reading skills, and language mechanics.

Meredith, Keith, & Vaughan, Joseph. Stability of cloze scores across varying deletion patterns. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978. 181-184.

Investigates the stability and reliability of cloze test scores based on the word deletion patterns as compared to cloze test scores based on random word deletion patterns. A 250-word segment was taken from a passage determined to be at a sixth grade readability level. Five cloze test forms using an every-fifth-word deletion pattern and five test forms deleting a random sample of fifty words were developed from the passage. The ten cloze test forms were then randomly assigned to 446 grade 7 and 8 students. Exact word replacement was used in scoring the tests. Significa[illegible]rences were found among the mean scores for the five every-fifth-word de[illegible] cloze tests; no significant differences were found among the mean scores for the random cloze tests. Thus, the random deletion patterns were more stable. A smaller range of means was found for the random deletion cloze than for the *n*th deletion cloze.

Vaughan, Joseph L., Jr., & Meredith, Keith E. Reliability of the cloze procedure as assessments of various language elements. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference,* 1978. 175-180.

Examines internal consistency reliability and parallel form reliability of the cloze procedure. Subjects were 298 eighth grade students who read two science-related passages followed by a 50-item, every-seventh deletion pattern cloze test. Five scores were derived: 1) Semantically Acceptable, Exact-Replacement (ER); 2) Semantically Acceptable, Exact-Replacement-Plus-Synonyms (ER + SNM); 3) Syntactically Acceptable (STC); 4) Syntactically Acceptable Minus Exact-Replacement (STC-ER); and 5) Syntactically Acceptable Minus Exact-Replacement-Plus-Synonyms (STC-ER + SNM). Scores derived from these procedures were examined for internal consistency and parallel form reliability was also determined. Coefficients for the ER and the ER + SNM forms ranged from .86 to .92 for internal consistency and .79 to .81 for parallel form reliability. For the STC score, internal consistency coefficients were .95 and .94; parallel form coefficient was .86. Internal consistency coefficients ranged from .67 to .81 for the STC-ER and the STC-ER + SNM forms, and parallel form coefficients were .73 and .67. The author concludes that mutiple cloze selections should be used in order to obtain an accurate assessment of reading ability.

Porter, Don. Cloze procedure and equivalence. *Language Learning,* December 1978, *28,* 333-341.

Constructs two cloze tests, identical in form except that in one test the deletions occurred one word earlier than in the second and presents them to thirty-nine Polish students. Each test consisted of one literary and one non-literary passage, each with fifty blanks. No strong correlation coefficient was found between performance on the two tests or on literary and non-literary passages. The author concluded that two cloze tests do not necessarily yield equivalent results.

CUNNINGHAM, JAMES W., & CUNNINGHAM, PATRICIA M. Validating a limited—cloze procedure. *Journal of Reading Behavior,* Summer 1978, *10,* 211-213.

Uses data from two studies to compare a limited cloze procedure with the regular cloze procedure. In the limited cloze procedure, deleted words are randomly ordered and placed above the passage. In both studies the same passage was used in both cloze forms. Subjects for study one were 163 grade 7 pupils; in study two, 203 grade 5 pupils were used. Subjects were assigned randomly to either a cloze or a limited-cloze group. The validity and reliability of the limited cloze test equaled or surpassed that of the regular cloze. However, a sustantially different instructional level percentage range was found between the two studies on the limited-cloze test, thereby making results from it less interpretable than results from the regular cloze.

RUSH, ROBERT J., & KLARE, GEORGE R. Re-opening the cloze blank issue. *Journal of Reading Behavior,* Summer 1978, *10,* 208-210.

Investigates the issue of word length cues on cloze scores with 128 college students. A 2-paragraph selection was utilized in constructing the cloze passage; three of the forms utilized a deletion pattern that omitted every fifth word beginning with the second word, and three beginning with the fifth word, in the second sentence. Experimental conditions ranged in cue availability from minimal, to intermediate, to maximal with regard to the blank length. The maximum cue condition (proportional dashed lines) had a significantly higher mean number of correct responses than either of the other two forms.

ENTIN, EILEEN B., & KLARE, GEORGE R. Some inter-relationships of readability, cloze and multiple choice scores on a reading comprehension test. *Journal of Reading Behavior,* Winter 1978, *10,* 417-436.

Administers seven passages of a reading comprehension test to college students to compare regular multiple choice test scores with scores on two forms of a cloze test (standard blank and dash-blank), and with readability formula values. The *Nelson-Denny Reading Test* was used, and seven 200-word passages from it were prepared in both multiple choice and the two cloze forms. The cloze tests were given first to the experimental group, followed by the multiple choice form one week later. A control group took only the multiple choice form. Experimental subjects filled out a preference questionnaire. The dash line cloze procedure produced significantly higher results than the solid line cloze. Subjects' scores on both cloze forms were significantly related to scores on the multiple choice form. Regression equations were derived to predict multiple choice scores from cloze scores. Mean scores on cloze forms correlated with readability values at the passage level, but multiple choice means were correlated with neither. In a supplementary study, when multiple choice scores were corrected for prior knowledge, they correlated positively with cloze test scores and with readability values.

Evans, Ronald V., & Ballance, Collin, T. Cloze scores and writing criteria as predictors of instructional level. *Journal of Educational Research,* November/December 1977, *71,* 110-113.

Studies cloze and grade level relationships at higher grade levels. Subjects were thirty grade 8, thirty grade 12, and thirty senior level university students. Three expository passages, three narrative passages, and three descriptive passages were selected from published writings and rewritten into a simple, a moderate, a difficult version, each one controlled by transformations. Subjects read the passages and then filled in a cloze form of the passage. Subjects were also asked to rewrite a model paragraph, and their rewrites were analyzed on three criteria of syntactic complexity. Scores on exact fill-ins on the cloze test and scores on the measures of syntactic complexity were tabulated. Multivariate analysis of variance and discriminant analysis procedures were used. Findings indicated that cloze procedure was best suited to middle school years, with its usefulness declining as readers mature.

Dupuis, Mary M. The cloze procedure: can it be used with literature? *Reading Improvement,* Winter 1976, *13,* 199-203.

Examines the efficacy of using the cloze procedure as a predictor of reading success with literature for 392 secondary school students. Tenth graders in English classes read short stories with a cloze exercise as as pretest and a multiple choice comprehension test as a posttest. In the cloze passages, initial sentences were left intact followed by an every-fifth-word deletion pattern. Correlation coefficients between pre- and posttests were significant for both stories. Prediction equations were developed that supported the use of a 48 percent cloze score as the criterion cut-off for minimum comprehension.

Propst, Ivan K., Jr., & Baldauf, Richard B., Jr. Use matching cloze tests for elementary ESL students. *The Reading Teacher,* March 1979, *32,* 683-690.

Describes the development and validation of a modified cloze procedure used to construct three English reading achievement tests, one each for grades 3, 4, and 5, to be used with ESL children in the Mariana Islands. The cloze tests and the *Gates-MacGinitie Reading Tests* were given to 383 grade 3, 196 grade 4, and 204 grade 5 pupils. Coefficients between the Vocabulary and Comprehension subtests on the Gates and cloze test scores ranged from .71 to .83. The cloze tests were found to depict more accurately the range of individual differences than did the Gates.

Cohen, Elaine Landau, & Poppino, Mary. Cloze testing and study skills for college biology. *Science Education,* October/December 1978, *62,* 443-447.

Studies the relationship between cloze test scores and grade in a college biology class. A 50-blank cloze passage based on an excerpt from a biology text and the *Confidence Inventory* were administered to students in four biology sections during the first week of classes. Cloze test scores were reported and interpreted to students at the second biology class meeting, and subjects were invited to enroll in a reading class emphasizing study skills based on their biology assignments. Cloze scores and biology grades were analyzed for 183 students with a resultant coefficient correlation of .31. The cloze test was also determined to be a successful diagnostic tool. Subjects in the paired study skills-biology courses expressed greater growth in confidence about their skills in biology than did subjects enrolled in the biology class only.

Carey, Robert F. Cloze encounters of a different kind. *Reading Horizons*, Spring 1979, *19*, 228-231.

Contends that a growing body of research points towards the validity of using a cloze test after oral reading for comprehension assessment.

Weaver, Gail Cohen. Using the cloze procedure as a teaching technique. *The Reading Teacher*, February 1979, *32*, 632-636.

Reviews some ERIC/RCS documents on use of the cloze procedure. Includes some research on the use of cloze for teaching reading.

Grant, Patricia L. The cloze procedure as an instructional device. *Journal of Reading*, May 1979, *22*, 699-705.

Reviews important research, informal experimentation, and other relevant publications regarding use of the cloze procedure as an instructional tool.

V-13 d. Content analysis

Jenkins, Joseph R., & Pany, Darlene. Curriculum biases in reading achievement tests. *Journal of Reading Behavior*, Winter 1978, *10*, 345-357.

Examines the extent and direction of curriculum bias in standardized reading achievement tests. Bias was estimated by comparing the relative overlap in the contents of five standardized achievement tests with the first and second grade contents of seven commercial reading series. The tests examined were the *Wide Range Achievement Test* (WRAT), *Peabody Individual Achievement Test* (PIAT), *Metropolitan Achievement Test* (MAT), *Stanford Achievement Test* (SAT), and the *Slosson Oral Reading Test* (SORT). The words included in each basal program at grades 1 and 2 were alphabetized and compared for overlap with alphabetized lists of words in the standardized tests and subtests of word recognition. Overlap was reported in terms of grade equivalent scores that would be expected on the tests given mastery of the words which appear in both the reading series and as test items. The findings showed discrepancies between the grade equivalent scores obtained both between tests for a single curriculum and on a single test for different reading series.

JENSEN, MARJANE, & BECK, MICHAEL D. Gender balance analysis of the Metropolitan Achievement Tests, 1978 edition. *Measurement and Evaluation in Guidance*, April 1979, *12*, 25-34.

Analyzes the 1978 edition of the *Metropolitan Achievement Test* (MAT) to determine the extent to which it conforms to guidelines for a balanced representation of sexes and sex roles. Text and illustrations were examined using both a quantitative and a qualitative method. The quantitative analysis involved a tally of male, female, and neuter nouns and pronouns and the calculation of a gender ratio and a neuter ratio. The qualitative analysis involved coding the test items into four categories: active or passive roles, and traditional and nontraditional occupations, activities, and emotions. The MAT appeared to have good gender balance and showed a marked improvement over the previous edition. The present edition had a less stereotyped portrayal of both sexes than the earlier edition.

CONLON, THOMAS F.; EKSTROM, RUTH B.; & LOCKHEED, MARLAINE E. The consequences of sex bias in the content of major achievement test batteries. *Measurement and Evaluation in Guidance*, January 1979, *11*, 202-216.

Examines the content of several achievement tests for sex bias and relates the test content to the difference in male-female test responses. The tests analyzed included the Reading section of the *Metropolitan Achievement Tests* (MAT), Primary II, the *Iowa Tests of Basic Skills* (ITBS) Levels 14 and 11, and the Sequential Tests of Educational Progress (STEP), Level 2A. On the ITBS and STEP batteries, the reading tests were included as part of the analysis. The content analysis focused on: 1) the number of males and females in items, 2) the number of references to males and females, 3) the various roles attributed to each sex in the content, and 4) the relative status of male and female roles. In addition to the content analysis, the scores of at least 1,000 males and 1,000 females on each test at grades 2, 5, 8, and 10 were obtained. Scores were examined for the percent of each sex passing and for sex differences in passing for each of the four content analyses conducted. There was a significant tendency in grades 5, 8, and 10 for females to do better on items that contained female references. There was also a tendency for both sexes to perform less well on items containing greater numbers of references. Very few references to people were found on tests other than reading or vocabulary. References to males were more frequent at all levels than are references to females.

V-13 e. Test reliability and validity

DAVID, JANE L., & PELAVIN, SOL H. Evaluating compensatory education: over what period of time should achievement be measured? *Journal of Educational Measurement*, Summer 1978, *15*, 91-99.

Evaluates students in compensatory education programs, grades 3 through 9, on a fall-to-fall rather than a traditional fall-to-spring assessment period. Nine cohorts of students were involved in the study. Two programs were assessed, one utilizing the *Gates-MacGinitie Reading Test* and the other using the *Comprehensive Test of Basic Skills*. Fall-to-fall achievement gains were shown to be considerably smaller than fall-to-spring gains, indicating a large and statistically significant achievement loss over the summer months. In many instances, reading gains were cut in half by changing the assessment period to fall-to-fall.

ANDRICH, DAVID, & GODFREY, JOHN R. Hierarchies in the skills of Davis' Reading Comprehension Test, Form D: an empirical investigation using a latent trait model. *Reading Research Quarterly*, 1978-79, *14*(2), 182-200.

Examines the *Davis Reading Skills Test*, Form D, to determine if it measures a single factor of reading comprehension or more than one factor. The Rasch unidimensional latent trait model was utilized in analyzing the test. The test was administered to 329 subjects ranging from year 9 through year 12 and first-year tertiary level of schooling in Western Australia. Final analyses were conducted using the results from 188 of these subjects. Results indicated that seventy-six of the ninety-six items on the test conform to the Rasch latent trait model, suggesting that from one perspective the test can be viewed as measuring a unidimensional skill. From a second perspective, however, the test can be viewed as measuring a series of different skills.

DRAHOZAL, EDWARD C., & HANNA, GERALD S. Reading comprehension subscores: pretty bottles for ordinary wine. *Journal of Reading*, February 1978, *21*, 416-420.

Studies reading comprehension subscores on one reading test to determine if the skills are discrete. Data included scores of about 3,000 pupils in grades 3 through 9 who took the appropriate level of the *Nelson Reading Skills Test*. Questions on the test are divided into three levels: literal (L), translation (T), and higher level (H). Subjects' answer sheets were scored separately for the L, T, and H tasks and reliability coefficients for each of the L, T, and H variables at each grade were determined. Intercorrelation coefficients were then computed and subjected to attenuation. Corrected correlation coefficients tended to be close to 1.0, thereby suggesting that the three kinds of tasks do not reflect independent attributes but rather alternative means of assessing the same things.

WIKOFF, RICHARD L. Correlational and factor analysis of the Peabody Individual Achievement Test and the WISC-R. *Journal of Consulting and Clinical Psychology*, April 1978, *46*, 322-325.

Analyzes the performance of 180 children, ages 6 to 17, on the *Peabody Individual Achievement Test* (PIAT) and the *Weschsler Intelligence Scale for Children* (WISC-R). Subjects were referred to a learning disabilities specialist and exhibited such problems as hyperactivity, distractability and short attention spans. Their test scores were factor analyzed in order to determine the number and kinds of factors measured by the PIAT. Two factors were revealed when the PIAT was factored alone. Reading Recognition, Reading Comprehension, and

Spelling loaded highly on a Word Recognition factor, whereas other subtests loaded on a School-related Knowledge factor. When the PIAT was factored with the WISC-R, a Word Recognition factor was again revealed. The author concluded that results supported the use of the PIAT as a separate test in a battery including the WISC-R.

Hanna, Gerald S., & Johnson, Fred R. Reliability and validity of multiple choice tests developed by four distractor selection procedures. *Journal of Educational Research*, March/April 1978, *71*, 203-206.

Views the relative merits of four methods of selecting multiple choice item distractors: frequency, discrimination, individual judgment, and group judgment. Two completion tests, one used as the criterion measure, based on interpreting graphic and tabular data were developed. One was administered to 1,391 grade 5 and 6 pupils. Distractors for two of the experimental tasks were developed from the responses of the 1,391 children and foils for the two judgmental tests were provided by teachers. The criterion measure was administered to 1,925 grade 5 and 6 pupils who took one of the experimental tests also. The findings suggested that the frequency procedure did not have an advantage over others. Tests developed by the other three procedures did not reveal consistent or significant differences in reliability of concurrent validity.

Fowler, Bill, & Kroll, Barry M. Verbal skills as factors in the passageless validation of reading comprehension tests. *Perceptual and Motor Skills*, August 1978, *47*, 335-338.

Does a validity study of the reading comprehension section of the *Minnesota Scholastic Aptitude Test* by assessing the passage dependency of the questions. In addition, the extent to which verbal skills influence performance on a passage dependency task was studied. All reading passages were deleted from the test, leaving only the questions. The questions were then administered to two groups: 1) 101 freshmen who had taken the Minnesota four months earlier, and 2) seventeen English Faculty members. The vocabulary section of the *Iowa Silent Reading Test* and other tests were also given to fifty-eight of the freshmen. Both groups scored considerably above chance on the passageless test. Moderate to low correlation coefficients were found between scores on the Minnesota and other measures of verbal ability. The r between the Minnesota and vocabulary on the Iowa was .40. Between the Minnesota and grades in English, the coefficient of correlation was .06. An analysis of individual items suggested there were four categories of questions on the Minnesota: context-cued, fact, stem-cued, and vocabulary. The vocabulary category accounted for eighteen of the thirty questions.

Beatty, James R. Construct validation of an instrument for screening learning disabilities. *Journal of Learning Disabilities*, January 1979, *12*, 49-56.

Examines the construct validity of the *Individual Learning Disabilities Classroom Screening Instrument* (CSI). The CSI was administered to sixty-one learning disabled children enrolled in the primary grades. Marker variables were then developed to reflect the ten factors identified from the CSI in an earlier study. Then ten scale scores and ten marker variable scores were obtained on each child. Heterotrait-heteromethod correlation coefficients and monotrait-heteromethod coefficients were computed to determine the CSI scale's validity. Seven of the ten factors met the criteria for convergent validity. Further analysis showed that the remaining forty-eight items of the CSI discriminated between learning disabled and normally functioning children. Scales were ranked from strongest to weakest. The analysis led to the development of a revised screening instrument.

Peterson, Joe; Greenlaw, M. Jean; & Tierney, Robert J. Assessing instructional placement with the IRI; the effectiveness of comprehension questions. *Journal of Educational Research*, May/June 1978, *71*, 247-250.

Utilizes three different sets of questions with an Informal Reading Inventory (IRI) to determine if they result in different instructional placement of children. IRI's were administered to fifty-seven children in grades 2 through 5. Kendall rank-order correlation coefficients computed to assess the relation between the instructional placement scores derived from the three sets of questions ranged from .78 to .83. The coefficients were not deemed large enough for interpretation of individual results but were sufficiently high to judge the achievement of groups of individuals.

Peters, Charles W. Assessing reading performance at the secondary level through the utilization of a cognitive self-rating scale. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference*, 1978. 161-165.

Ascertains whether the *Cognitive Self-Rating Scale* (SRS) is a reliable measure of reading performance as compared with an instrument designed to measure specific reading skills. Subjects were fifty-nine eighth graders who were identified as poor or good readers based on scores on the *Content Specific Reading Test* (CSRT). Scores on the SRS correlated .352 with scores on the CSRT. A factor analysis revealed that the SRS was comprised of five factors. An additional analysis revealed that it did discriminate between good and poor readers, but that it was not a good predictor of general reading performance. The SRS and CSRT were found to be consistent in their placement of poor readers but not consistent in placement of good readers.

Tew, Brian. Some doubts about the Frostig Test of Visual Perception. *Remedial Education*, 1976, *11*(1), 32-35.

Reviews some critical studies on the *Frostig Developmental Test of Visual Perception*.

Plake, Barbara S. The interpretation of norm-based scores from individualized testing using the Iowa Tests of Basic Skills. *Psychology in the Schools*, January 1979, *16*, 8-13.

Checks whether equal raw scores on the same level of the *Iowa Test of Basic Skills* (ITBS) obtained by children in different grades are comparable. The population consisted of all school systems in Iowa choosing a midyear, 1974 or 1975, date for testing that elected the option of testing some non-fifth grade pupils with level 11, form 5, of the ITBS. Data from the Vocabulary, Reading Comprehension, and Mathematics Concepts subtests of level 11 were analyzed for pupils in grades 4, 6, 7, and 8. For each of the four grades, two matched groups of pupils were selected from each school system, one representing those taking level 11 out-of-level and the other representing grade 5 pupils who took level 11. The two groups were matched based on pupils' raw scores so that groups were equal in size and had nearly identical means and variances. Item difficulties were calculated for each group from each school system. The data suggested that scores for out-of-level groups were comparable to those of in-level groups.

SILVERSTEIN, A. B. Note on the norms for the WRAT. *Psychology in the Schools*, April 1978, *15*, 152-153.

Compares the performance of a representative national sampling of subjects on the Reading and Arithmetic subtests of the *Wide Range Achievement Tests* (WRAT) with that of the norm groups. The two WRAT subtests were administered in the Health Examination Survey (HES) conducted by the National Center for Health Statistics. Raw score means and standard deviations were available for nineteen age groups: from 6 to 13½ years at 6-month intervals, 14, 15, and 16-17 years. HES means were lower and standard deviations were larger for all but two groups on Reading. The author feels that current norms, while adequate for many purposes, may not accurately reflect a subject's level of achievement relative to the general population and tend to underestimate achievement.

LANGE, BOB. A multiple choice answer to the standardized testing issue. *The English Journal*, October 1978, *67*, 92-94.

Discusses some ERIC materials that consider problems associated with standardized tests. Some research on reading tests is included.

WEST, ELLEN M. The use of an unobstrusive screening device to approximate reading levels of adults. In P. David Pearson & Jane Hansen (Eds.) Reading: disciplined inquiry in process and practice. *Twenty-seventh Yearbook of the National Reading Conference*, 1978. 190-192.

Discusses the development of an unobtrusive screening device to identify reading levels of adult students. The *West Informal Reading Evaluation* (WIRE) was disguised as a student survey and given to 154 Basic Education and Adult High School Completion students. The *Reading for Understanding Test* (RFU) was then given to 123 of the same students as a validity criterion measure. To establish reliability, an alternate form of the WIRE was given to 100 of the students. Validity coefficients of .868 and .818 were obtained between the two forms of the WIRE and the RFU. Reliability of the WIRE was found to be .847.

V-13 f. Competency testing

Fillbrandt, James R., & Merz, William R. The assessment of competency in reading and mathematics using community based standards. *Educational Research Journal*, Spring 1977, *2*, 3-21.

Describes the development of one high school district's competency standards in reading and mathematics. Proficiency standards were defined in terms of competencies existing in the local job market. A target population consisting of 300 successfully employed individuals holding entry-level jobs open to high school graduates was divided into two groups, one to be tested in reading and one in math. The results were reported and a comparison of high school seniors' scores with scores of the community sample was made.

Fitzgerald, Thomas P. Basic competency test in reading: Curriculum implications. *The English Record*, Fall 1978, *29*, 19-21.

Examines some issues in basic competency testing in reading and presents some data that help to explain the motivations behind basic competency testing.

Moore, David; Memory, David; & Seaton, Hal W. Minimal competency testing for high school graduation: where are we now? *Reading World*, March 1979, *18*, 280-289.

Discusses the nationwide movement towards minimal competency standards for high school graduation.

Hill, Walter. BCT: reading—problems in interpretation and implication. *The English Record*, Fall 1978, *29*, 12-15.

Looks at the legislative roots, administrative purposes, and the nature of the Basic Competency Tests in Reading that are used in New York State. Includes some statistics estimating the extent of functional reading difficulties.

V-14 Instructional time

Kiesling, Herbert. Productivity of instructional time by mode of instruction for students at varying levels of reading skill. *Reading Research Quarterly*, 1977-1978, *13*(4), 554-582.

Studies the relationship between student performance on standardized reading tests and amount of instructional time in reading. Data are based on over 2400 pupils in grades 4, 5, and 6 from 3 urban and one suburban school district. Reading performance was assessed by means of two forms of the *California Achievement Test* (CAT) and a set of criterion-referenced tests (CRT) developed by the New York State Education Department. Alternate forms of the CAT were given in February and May, while the CRT was given four times over a 9-week period. Number of minutes of instruction, type of instruction (large group, small group, individualized) and type of instructor (classroom teacher, specialist, paraprofessional) were collected from interviews. Multivariate methods were used in analyzing data. More resources were given to lower performing children. With respect to the relationship of instructional time to reading performance, it was noted that classroom teacher, small and large group instruction was positively related to reading gains from 30 to 50 percent of the time. The positive relationship was strongest for children at or slightly below grade level and weakest for pupils above grade level.

ROSENSHINE, BARAK, VICTOR. Academic engaged time, content covered, and direct instruction. *Journal of Education*, August 1978, *160*, 38-66.

Highlights some new findings on the relationship between classroom instruction and student achievement gain in reading and mathematics.

O'DONNELL, HOLLY. Instructional time as related to reading achievement. *The Reading Teacher*, November 1978, *32*, 246-251.

Examines some of the earlier studies on time allotments, studies that relate time to reading achievement, and the recent Beginning Teacher Evaluation Study.

V-15 Trends in reading

NGANDU, KATHLEEN M. Issues and trends: IRA national conventions, 1962-1977. *Reading Horizons*, Winter 1979, *19*, 123-127.

Analyzes International Reading Association conventions during the years 1962-1977 in order to identify major issues and trends in the field of reading. Programs from four representative conventions spaced at 5-year intervals (775 meetings) were selected for examination. A total of ninety-nine topics were identified by categorizing titles of sessions; a session could be tallied in more than one category. Lead speakers, their affiliations, regions, and sex were also recorded. Among the thirteen trends or conclusions the author provided were: 1) an expanding interest in comprehension; 2) an emphasis on minority student concerns; 3) a move toward nearly equal representation of male and female lead speakers; 4) a decrease in research reports and issues of research design; and 5) a dominance of the East coast in providing IRA lead speakers.

V-16 Television and reading instruction

MASON, GEORGE E., & MIZE, JOHN M. Teaching reading with television: a review. *Educational Technology*, October 1978, *18*, 5-12.

Reviews studies on teaching reading by using television. Areas that are overviewed are: reading and in-school television, instructional television viewed at home, television use with the computer, and educational (public) television and reading.

VI. Reading of atypical learners

This section encompasses research on the reading of various atypical learners. The largest subcategory in this grouping deals with the mentally handicapped and the hearing impaired. In addition, there are reports on the visually impaired and the multi-handicapped learner.

VI-1 Visually handicapped

Berla, Edward P., & Butterfield, Lawrence H., Jr. Tactile political maps: two experimental designs. *Visual Impairment and Blindness,* June 1977, *71,* 262-267.

Investigates the ability and speed of seventy-two Braille readers in grades 4-12 to locate and trace shapes on three types of tactile political maps. Two experimental maps, one with broad raised boundary lines and one with broad incised boundary lines, were each tested against a typical map with thin raised lines (control map). All three types of maps were otherwise identical, consisting of six states placed randomly among other boundary lines. Performance on the broad raised line map was superior to that on the control map, but performance on the broad incised line map was not.

Daugherty, Kathryn M. Monterey learning systems: improving academic achievement of visually impaired learners. *Visual Impairment and Blindness,* September 1977, *71,* 298-301.

Reports the effects of the Pittsburg Public Schools 1975-1976 project involving the use of the *Monterey Learning Systems Reading and Mathematics Program* to enhance the academic competencies of the visually impaired. These highly individualized programs, which included a diagnostic component and much accountability, served as a 5-month supplement to the schooling of twenty-nine visually impaired students. Pre- and posttests on the *Gilmore Oral Reading Test* (Form C) yielded average gains of just over one year in decoding and just under one year in comprehension. Gains of similar magnitude were made in math.

Kleinstein, Robert N. Reading with a 10X telescope. *Journal of Optometry and Physiological Optics,* October 1978, *55,* 732-734.

Presents a case report describing use of a 10X Selsi telescope with a + 3.50D reading cap with a 10-year old partially signed one-eyed patient with 10/200 distance acuity and no experience in using an optical aid. With the telescope and cap, the patient could read 20/40 at 28 cm. To permit the patient use of both hands to hold the device, or to hold the device and write, a reading easel was prepared to hold the material upright and a high intensity lamp was used for illumination control. The light improved the contrast of the material and the stand eliminated some of the fatigue. The researcher believed the solution to be unique and reported one successful replication.

Mangold, Sally S. Tactile perception and braille letter recognition: effects of developmental teaching. *Journal of Visual Impairment and*

Blindness, September 1978, *72,* 259-266.

Studies the extent to which a developmental program of tactile perception and Braille letter recognition affected the three most frequent errors in Braille reading: tactile perception, Braille letter recognition, and scrubbing and backtracking behaviors. Thirty blind Braille users, aged 5-15, were matched according to date of birth, visual acuity, extent of braille use, beginning or remedial school placement (public or residential), and pretest scores. The treatment condition consisted of administration of 227 worksheets. The ten pretest measures served as a posttest and as a 2-month follow-up to determine the degree of maintenance of experimental effects. While analysis of pretest data established equivalency of groups, the analysis of the posttest data revealed a highly significant difference in favor of the experimental group on all ten tests. The experimental subjects demonstrated significantly less scrubbing and backtracking and made fewer errors in letter recognition.

FISHBEIN, HAROLD D. Braille-phonics: a new technique for aiding the reading disabled. *Journal of Learning Disabilities,* January 1979, *12,* 60-64.

Describes a technique for improving word-attack skills of sighted reading disabled children through the use of Braille. Subjects were ninety-eight children in learning disability-behavior disorder classes who were at least one and one-half years below grade level in reading ability. They ranged in grade from second to sixth. Subjects were divided into two groups, experimental and control, matched for age, sex, race, and socioeconomic status. Experimental children received reading and spelling instruction in groups of two, three, and four for about one and one-half hours a day, 30 to 45 minutes of which was in the Braille-phonics approach (BP). In October of the experimental year, all subjects were given the *Spache Diagnostic Reading Scales,* the *Gates-McKillop Spelling Scales,* and the *Wide Range Achievement Test* in spelling. Alternate forms of the Spache were given in February and again in May. Experimental children were also given the *Illinois Test of Psycholinguistic Abilities.* Experimentals improved significantly more than controls in six of the seven phonics subtests on the Spache, in auditory discrimination, and in spelling. No significant differences were found for reading comprehension.

VI-2 Hearing impaired

BROWNS, FRED A. Beginning reading instruction with hearing-impaired children. *Volta Review,* February/March 1979, *81,* 100-108.

Describes a study of fifteen severely hearing-impaired, low-achieving students (ages 7-12 1/2 years) of the Montreal Oral School for the Deaf. Subjects were tested for language level (Preschool Language Scale of the Slow Learner Series) and reading level (The *Slosson Oral Reading Test* and the *Standard Achievement Recording System*). Low correlations between language and reading scores led to the conclusion that factors other than measurable lanaguage development should be considered in determining when to begin a reading program with severely hearing-impaired children. In a second study, four hearing-impaired boys (66-78 months old) with language ages from 45.8 to 60.8 months attained varying levels of reading ability when instructed with the commercially available Michigan Reading Program.

DOEHRING, DONALD G.; BONNYCASTLE, DALE E.; & LING, AGNES H. Rapid reading skills of integrated hearing-impaired children. *Volta Review,* October-November 1978, *80,* 399-409.

Tests the reading and language skills of twenty-one hearing-impaired students, ages 6-13, from English public school classes in Montreal. All received eleven reading tests, three language tests, and two naming tests. The eleven profoundly impaired subjects had group medians below normal grade level in two of the reading tests and all of the language tests. The ten remaining severely impaired subjects exhibited the same pattern of results, but about one year lower for their age than the profoundly impaired group. Significant correlations between reading and language scores were obtained. The appropriateness of standardized language tests and the importance of assessing component reading skills were discussed.

FRIEDMAN, JUDITH B., & GILLOOLEY, WILLIAM B. Perceptual development in the profoundly deaf as related to early reading. *The Journal of Special Education,* Fall 1977, *11,* 347-354.

Investigates the ontogeny of deaf children's attention to the orthographic structure of letter sequences. Subjects were sixty-three profoundly, prelingually deaf students (ages 9-14 years) at a school for the deaf matched with forty-five hearing students from a public school on the basis of scores on the Vocabulary Reading subsection of the *Gates-MacGinitie Reading Test.* Subjects, grouped into first, second, and fourth grade reading levels, saw pronounceable and unpronounceable 3-, 4-, and 5-letter strings presented tachistoscopically. Deaf subjects' performance exceeded that of hearing subjects for unpronounceable strings at the fourth grade level, and matched it in every other comparison.

HENDRICKSON, JOE D., & UHRIG, ELAINE. An application of learner referenced evaluation: acoustically handicapped. *Colorado Journal of Educational Research,* Summer 1978, *17,* 27-31.

Reports results of an evaluation of the acoustically handicapped teacher training program at the University of Northern Colorado. The Learner Referenced Educational Evaluation Model was used to determine the extent to which thirty-four specific competencies in eight general areas were being mastered by twenty-seven seniors and graduate students enrolled in student teaching during the 1977-78 academic year. Additional purposes of the evaluation included determining the effectiveness of student teachers in affecting learner changes, identifying the assessment procedures the student teachers used, and investigating the sources of instructional materials (i.e., commercial, teacher-made, both, or neither) they used with acoustically handicapped children. Competencies were judged by the faculty of the program based on 227 Individualized Educational Plans submitted by the student teachers. Results of the evaluation indicated that student teachers most frequently produced plans in math, reading and language, and could more frequently identify specific skill deficiencies in these areas. Their effect on learners was determined by comparison of actual versus expected pupil performance established by faculty members. Expected performance was achieved for two of the eight competency areas: expressive communication and learning process. Teachers relied on more informal than formal assessment techniques and used more teacher-made than commercially-produced materials.

McCLURE, AUDREY T. Academic achievement of mainstreamed hearing-impaired children with congenital rubella syndrome. *Volta Review,* October/November 1977, *79,* 379-384.

Explores the academic achievement of fourteen hearing-impaired children (ages 8-12 years) with congenital rubella syndrome who had been educationally mainstreamed. All of the subjects had early identification of hearing loss, early intensive therapy in an auditory program, and an initial hearing aid fitted before 39 months of age. All attended classes with their normally hearing peers. *Wide Range Achievement Test* scores revealed that the subjects were achieving at an average or near average rate. Math scores were about one year below grade-level, but reading and spelling scores were at about grade-level.

SCHOLES, ROBERT J.; COHEN, MARSHALL; & BRUMFIELD, SHANNON. Some possible causes of syntactic deficits in the congenitally deaf English user. *American Annals of the Deaf,* August 1978, *123,* 528-535.

Tests four rival hypotheses concerning the cause of syntactic impairment in 188 deaf, teen-aged students at the Florida School for the Deaf and Blind. Subjects were tested with two sentence comprehension tasks (Double-Object Constructions and Active and Passive sentences) to determine if difficulties with sentence types could be explained by a developmental lag, the method of sentence presentation (graphic), inadequate teaching methodology, or inability of deaf students to master the syntactic component of normal language. Results indicated good comprehension of simple actives, poor comprehension of more complex structures, and a tendency to interpret passives as subject-verb-object. Comprehension scores were considered in terms of nine subject variables, including IQ, age, sex, and reading level. Only subjects' reading grade level showed a consistent relation to sentence comprehension. The accepted explanatory hypothesis was that an auditory impairment during the language acquisition years is detrimental to comprehension of certain aspects of English syntax.

SIPLE, PATRICIA; FISCHER, SUSAN D., & BELLUGI, URSULA. Memory for nonsemantic attributes of American sign language signs and English words. *Journal of Verbal Learning and Verbal Behavior,* October 1977, *16,* 561-574.

Presents two recognition memory experiments that suggest that American Sign Language (ASL) signs are encoded and stored in memory like lexical items from any language. In Experiment 1, thirty-six deaf college students proficient in ASL were presented a list of videotaped ASL signs and printed English words for memory. Upon seeing some of these items again in a recognition list, the subjects demonstrated better recall for signs and better recall of the presentation form for signs. In Experiment 2, seven hearing college students unfamiliar with ASL demonstrated considerable visual interference among signs in a similar task, a result not found in Experiment 1. The authors argued that long-term memory representations for signs are organized by abstract semantic characteristics.

STUCKLESS, E. ROSS. Technology and the visual processing of verbal information by deaf people. *American Annals of the Deaf*, October 1978, *123*, 630-636.

Considers technological advances in aiding deaf people to process verbal information. Includes some basic research on reading words and sentences.

GORMLEY, KATHLEEN A., & FRANZEN, ANNE MCGILL. Why can't the deaf read? Comments on asking the wrong question. *American Annals of the Deaf*, August 1978, *123*, 542-547.

Reviews current research on the deaf reader and presents a theoretical framework for viewing the deaf reader as a uniquely different reader.

SCHWARTZ, JUDY I. Teaching reading to the hearing-impaired child. *Reading Horizons*, Summer 1978, *18*, 249-257.

Points out a serious educational lag of deaf children when compared to the hearing population. Notes research on reading achievement of deaf children and suggests a plan for teaching deaf children to learn to read.

CRANDALL, KATHLEEN F. Reading and writing skills and the deaf adolescent. *Volta Review*, September 1978, *80*, 319-332.

Provides recommendations relative to the use of reading and writing by deaf adolescents. Discusses some research on the reading achievement of the deaf.

VERNON, MCCAY, & COLEY, JOAN D. The sign language of the deaf and reading-language development. *The Reading Teacher*, December 1978, *32*, 297-301.

Proposes that teaching sign language to children who can hear may make it easier for them to learn to read. Includes some research on the use of sign language for communication.

VI-3 Mentally handicapped

BELCH, P. J. Improving the reading comprehension scores of secondary level educable mentally handicapped students through selective teacher questioning. *Education and Training of the Mentally Retarded,* December 1978, *13,* 385-389.

Investigates the effect of different classroom questioning strategies on students' reading comprehension. The subjects were seventy-five secondary level students enrolled in classes for the educable mentally handicapped (average CA = 17.1 years; average IQ = 72.0) who had reading comprehension grade equivalent scores of at least 3.5. Subjects were assigned to one of three treatment groups. Each read a specially prepared, high-interest, low-readability selection each day for 25 days and, depending upon treatment group, either 1) answered ten to fifteen high-order questions (calling for higher cognitive processes), 2) answered ten to fifteen low-order questions (calling for memorization), or 3) indicated whether they liked the passage. The Reading Comprehension section of the *Comprehensive Tests of Basic Skills,* Level II, served as a pre- and posttest. Only subjects who had training involving high-order questions demonstrated improved reading comprehension skill.

DOMNIE, MILDRED, & BROWN, LOU. Teaching severely handicapped students reading skills requiring printed answers to who, what and where questions. *Education and Training of the Mentally Retarded,* December 1977, *12,* 324-331.

Describes a program for teaching four severely mentally handicapped students (Mean IQ = 45) reading comprehension skills that could be practiced without the physical presence of instructional personnel. Specifically, the program attempted to teach the students ninety words, to label those words as they occurred in stories and questions, and to write answers to who, what, and where questions. There were five instructional phases and each of the four students achieved criterion level in each phase; i.e., the students could label ninety words, label those words as they occurred in ten stories, and print answers to literal level questions pertaining to those stories.

FOLK, MARY C., & CAMPBELL, JACK. Teaching functional reading to the TMR. *Education and Training of the Mentally Retarded,* October 1978, *13,* 322-326.

Reports results of an attempt to teach trainable mentally retarded (TMR) children functional reading skills. Subjects were three Down's syndrome girls (ages 6-7 years) enrolled in a demonstration class who had no academic skills and varying speech skills. Each child received an individualized program of word identification, phrase and sentence comprehension, and word-attack skills. After 5-15 months of one hour of training per day in a classroom setting, subjects would read 30-132 words with 100 percent accuracy and could identify 2-21 consonant sounds.

NEVILLE, DONALD D., & VANDEVER, THOMAS R. Letter discrimination in mildly retarded beginning first graders. *Mental Retardation,* December 1976, *14,* 49-58.

Determines the ability of nineteen mildly mentally retarded first-grade children (M=7; F=12) to make letter discriminations as compared with average IQ children (M=8; F=11) of the same mental age. Three aspects of letter discrimination profiles were examined: level, dispersion and shape. Nine lower case letters, taken two at a time, were presented first as a probe on a display screen, again as a probe with two distractors, one letter identical to the probe, the other different. By applying a t-test for the total correct discriminations, the researchers found a significant difference in favor of the retarded children. A significant correlation (.58) was found for the shape of the distributions of responses to letter comparisons. The nonretarded group was characterized by significantly greater variability. There was no significant difference in response to reversals. However, retarded first graders were more proficient in making nonreversal discriminations.

WALSH, BRENDA FRAWLEY, & LANBERTS, FRANCES. Errorless discrimination and picture fading as techniques for teaching sight words to TMR students. *American Journal of Mental Deficiency,* March 1979, *83,* 473-479.

Compares the effectiveness of two approaches for teaching beginning sight words to trainable mentally retarded (TMR) students. Thirty students (mean chronological age = 148 months; mean mental age - 59 months) from self-contained TMR classes in public schools participated. Each received five days of training with picture-fading technique and five days of training with a modified Edmark errorless-discrimination technique. Both training periods, counterbalanced for order of presentation, were conducted by the students' usual teachers and were followed by tests of word identification, word recognition, and picture-word matching. Subjects scores on all three tests were higher after the errorless-discrimination training.

WHORTON, JAMES E., & ALGOZZINE, ROBERT F. A comparison of intellectual, achievement, and adaptive behavior levels for students who are mildly retarded. *Mental Retardation,* August 1978, *16,* 320-321.

Determines the statistical relationships between data used in the identification of seventy-five public school students who are mentally retarded and their academic achievement. Students represented both full-time special classes (N = 54) and regular classes (N = 21). Their mean chronological age was 10-0 and mean IQ was 62. Recorded intellectual level, adaptive behavior rating, and reading, spelling, and arithmetic achievement levels were tabulated for each subject. Mental age (MA), expected grade level (EGL), and adjusted grade level expectancy (AEGL) were computed. Correlations between intellectual level and achievement levels were not significant. Yet the correlations between adjusted expectancy level and reading, spelling, and arithmetic achievement levels (ranging from .52 to .75) were all significant (p .01). In all comparisons, total group correlations between adjusted expectancy level and obtained achievement were higher than those between intellectual level or adaptive behavior level and achievement, suggesting that adjusted expectancy level, dependent on MA, may be a stronger predictor of academic achievement than IQ.

Wolfe, Vicki Fein, & Cuvo, Anthony J. Effects of within-stimulus and extra-stimulus prompting on letter discrimination by mentally retarded persons. *American Journal of Mental Deficiency,* November 1978, *83,* 297-303.

Compares two prompting procedures for teaching letter discrimination to twenty-four institutionalized severely retarded people (mean chronological age = 21 years, 10 months; mean IQ = 28). Subjects were given discrimination training on three letters with extra-stimulus prompting (pointing to the stimulus) and on three other letters with within-stimulus prompting (highlighting the letters' critical features). Each target letter was presented with two distractors and was learned to criterion. A recognition test wherein subjects pointed to a named letter was administered prior to, immediately following, and two weeks after training. Better performance was demonstrated for letters learned using within-stimulus prompting on both post-training tests.

Steinaker, Norman, & Harrison, Marilyn. Special education class achievement and an experiential taxonomic curriculum. *Educational Research Quarterly,* Fall 1977, *2,* 13-21.

Reports a study of special education students to determine the effectiveness of an experiential taxonomic-based curriculum on achievement gains in reading, spelling, mathematics, social responsibility, and written communication. Subjects included one junior high EMR class and an EH fourth through sixth grade class for the experimental group. The control group was an EH class of first through third graders, ages 6 to 12. Pre- and posttest scores on the *California Test of Basic Skills* and the *Wide Range Achievement Test* for spelling were collected. Additionally a Weekly Student Report was completed by each teacher. The EMR experimental class achieved significantly higher gain scores in reading and written communication than did the control group.

VI-4 Multi-handicapped

Gajar, Anna. Educable mentally retarded, learning disabled, emotionally disturbed: similarities and differences. *Exceptional Children,* March 1979, *45,* 470-472.

Analyzes characteristics of 378 special education children (F=86; M=292) identified as educable mentally retarded, learning disabled, and emotionally disturbed in terms of their relevance in defining and identifying exceptional children. Characteristics selected for study were grouped into three areas: 1) cognitive; 2) affective; and 3) demographic. Results of the study revealed a number of significant differences among the three groups. Educable mentally retarded students (N=121) were distinguished by low IQ scores; learning disabled students (N=135) were distinguished from emotionally disturbed subjects (N=122) by low reading achievement and from both groups by higher scatter scores on the WISC subtests; emotionally disturbed students were distinguished from the other groups by low arithmetic achievement and high scores on affective measures (conduct disorder, and personality problems). Similarities across categories were below population-norm IQ scores, underachievement, feeling of immaturity-inadequacy, and a large proportion of the sample was Black, male, and from low socioeconomic backgrounds.

NEELY, MALCOLM D., & LINDSLEY, OGDEN R. Phonetic, linguistic, and sight readers produce similar learning with exceptional children. *Journal of Special Education,* Winter 1978, *12,* 423-441.

Summarizes in the form of average learning pictures the results of three years of pupil performances and learnings with ninety-four books from seventeen different reading curricula. The twenty-eight teachers and twelve support staff involved planned their lessons and measured, with precision teaching conventions, the performance and progress of about half of their students. The subjects (5-21 years) included almost all exceptionalities. The major findings were that the different curricula produced equal amounts of learning, and that the average learning of the exceptional children equaled that of regular children. Strategies for improving learning were discussed.

WEBSTER, RAYMOND E., & SCHENCK, SUSAN J. Diagnostic test pattern differences among LD, ED, EMH, and multi-handicapped students. *Journal of Educational Research,* November/December 1978, *72,* 75-80.

Tests the efficacy of diagnostic test data in differentiating learning disabled (LD) children from non-LD children. The authors examined the case files of 1,524 children (6-17 years) of about average intelligence who had been referred by classroom teachers to a special education diagnostic team and had been labled LD, emotionally disturbed, educable mentally handicapped, multi-handicapped, or other. Six discriminant functions analyses were performed using various combinations of these variables: CA, MA, three *Wide Range Achievement Test* subtest grade equivalent scores, ten WISC-R subtest scores, which member of the special education diagnostic team had labeled the child, and expected level of school achievement. These analyses, and a review of relevant research, indicated that widely used diagnostic tests have little utility in distinguishing LD from non-LD children.

VI-5 Other atypical learners

MARSHALL, ROBERT C.; KUSHNER, DEANIE; & PHILLIPS, DAVID. Letter recognition ability of aphasic subjects. *Perceptual and Motor Skills,* December 1978, *47,* 1231-1238.

Examines the letter-recognition abilities of forty-four aphasic (27-84 years) and ten normal (52-73 years) subjects. Aphasic subjects were at least two months past onset and exhibited no relevant visual or hearing difficulties. Each was judged either severe or moderate, according to achieved percentile ranking on the *Porch Index of Communicative Ability,* and fluent or nonfluent, using speech output characteristics. Subjects pointed to a named target letter presented on a card with six foils. The moderate/fluent, moderate/nonfluent, and normals performed equally well. The severe/nonfluent performed significantly less well, and the severe/fluent performed worst. The types of letter recognition errors (e.g., acoustically related letters) were analyzed and the role of an intact semantic associational network in letter recognition was discussed.

Author Index, Summary of investigations relating to reading, July 1, 1978 to June 30, 1979

The following index includes the names of all the authors of reports in the summary followed by the part (Roman numeral), section (Arabic number), and page number in the summary where the citation and short abstract for the report by that author can be found. All authors—whether they are the first name given or the name given subsequent to that in a joint effort—are listed in this index. The names for the first authors on an article are italicized. When the report has two authors, the entry here for the first author given is followed by the last name of the other author. When there are three or more authors, the entry for the first author given is followed by *"et al."* The Roman face (non-italicized) entries in this index are the names of the authors given subsequent to the first author named.

A

Aaron, Ira E.: V-1, p. 230
Aaron, Robert L.: IV-17, p. 215
Aaron, Shirley L.: III-7, p. 69
Abbass, Mazin: III-3, p. 61
Abhari, J.A.: III-9, p. 75
Abrahamson, D.S.: V-10, p. 267
Abrams, Mark: III-4, p. 64
Ackerman, Gary: V-13 c, p. 287
Adams, Marilyn Jager: IV-9, p. 155
Adelman, Howard S.: II-5, p. 21
Adeniran, A. & Unoh: V-2, p. 232
Agha, Olfat Hasson: III-2, p. 57
Ahmed, Sa'ib Amin: III-9, p. 77
Alabi, G.: III-6, p. 68
Albert, Victoria F.: II-3, p. 11
Algozzine, Robert F.: VI-3, p. 306
Allen, Amy Roseman & Buraks: V-11, p. 272
Allington, Richard L.: II-1, p. 4; III-8, p. 70; IV-6, p. 137; IV-9, p. 162
Allington, Richard L. & Fleming: IV-9, p. 158
Allington, Richard L. & Strange: IV-14, p. 201
Almeida, Eduardo: V-6, p. 242
Alston, Herbert L.: IV-3, p. 106; IV-15, p. 206
Ames, Wilbur S. & Bradley: III-3, p. 60
Ames, Wilbur: III-3, p. 61; V-13 c, p. 287
Anderson, C.C. & Maguire: IV-13, p. 192
Anderson, Dennis L. & Byers: IV-5, p. 129
Anderson, Eleanor & Thomas: IV-13, p. 191
Anderson, Linda M., et al.: II-5, p. 17
Anderson, Richard C.: IV-5, p. 116
Anders, Leslie: III-10, p. 79
Anders, Patricia L. & Cardell: III-4, p. 62
Andre, Thomas & Womack: IV-5, p. 116
Andre, Thomas: IV-5, p. 125
Andrew, June M.: IV-14, p. 198
Andrich, David & Godfrey: V-13 e, p. 294
Annis, Linda: V-8, p. 256
Ansello, Edward F.: III-2, p. 37
Anselmo, Sandra: IV-8, p. 142
Applebee, Arthur N.: III-2, p. 36, IV-10, p. 167
Arbuckle, Tannis Y.: IV-9, p. 161
Armstrong, David L.: IV-11, p. 180
Arnett, John L. & DiLollo: IV-6, p. 134
Arnold, Helen: II-5, p. 16
Arnold, Marie J. & Ingraham: V-6, p. 246
Arter, J.A. & Jenkins: II-1, p. 7
Artley, A. Sterl: II-3, p. 11
Ashburn, Elizabeth A.: II-5, p. 17
Askov, Eunice N.: II-2, p. 9
Askov, Eunice N., et al.: II-3, p. 12
Asser, Paul Nijhoff: III-11, p. 84
Atkins, Paul A. & Elwood: III-1, p. 28
Auer, Michael, et al.: III-8, p. 72
Axelrod, Saul: V-11, p. 275, IV-9, p. 157
Ayers, A. Jean: V-11, p. 275
Azevedo, Milton M.: III-2, p. 44

B

Backer, Jacquelin C., et al.: IV-18, p. 217
Baker, Linda: IV-5, p. 119
Bakker, Dirk J. & VanRijnsoever: IV-1, p. 97

Balbo, Elvira: V-7, p. 251
Baldasty, Gerald J.: III-10, p. 79
Baldauf, Richard B., Jr.: V-13 c, p. 291
Baldwin, R. Scott & Readence: IV-10, p. 170
Baldwin, R. Scott & Coady: IV-10, p. 174
Baldwin, R. Scott: V-9, p. 258; IV-19, p. 222
Ballance, Collin T.: V-13 c, p. 291
Balow, Bruce, et al.: V-11, p. 271
Balow, Bruce: IV-15, p. 206
Banfield, Beryl: III-2, p. 39
Bank, H.: III-6, p. 69
Bannatyne, Alexander: IV-14, p. 196
Baron, Jonathan: IV-9, p. 156
Baron, Jonathan & Hodge: IV-9, p. 164
Barron, Roderick W. & Henderson: IV-5, p. 133
Barron, Roderick W.: IV-9, p. 152
Barrow, Lionel C., Jr.: III-10, p. 79
Beal, A. Lynne: IV-9, p. 164
Bean, Rita M.: II-7, p. 26
Bean, Thomas W.: IV-11, p. 184; V-8, p. 256
Beasley, Daniel: IV-14, p. 200
Beatty, James R.: V-13 e, p. 295
Becher, Rhoda McShane & Wolfgang: IV-3, p. 102
Beck, Frances W.: V-9, p. 264
Beck, Michael D.: V-13 d, p. 293
Becker, Curtis A.: IV-5, p. 132
Becker, Jorg J.R.: III-2, p. 44
Becker, Jorg: III-12, p. 86
Becker, Lee: III-1, p. 28
Becker, Lee B., et al.: III-15, p. 93
Beebe, Mona J.: IV-15, p. 208
Beech, John R.: IV-4, p. 110
Beecher, Ronnie: IV-14, p. 204; V-11, p. 274
Beezer, Bruce G.: V-1, p. 230
Belch, P.J.: VI-3, p. 304
Belkaoui, Janice Monti: III-2, p. 57
Bell, Anne E., et al.: V-10, p. 267
Belloni, Loretta Frances & Jongsma: IV-16, p. 212
Bellugi, Ursula: VI-2, p. 303
Bergman, Irwin B.: V-11, p. 277
Bergquist, Sidney R.: IV-10, p. 166
Berla, Edward P. & Butterfield: VI-1, p. 300
Berliner, David C.: IV-5, p. 113
Berthold, Howard C., Jr.: III-2, p. 45
Bertilson, H.S.: III-2, p. 48
Besner, Derek: IV-5, p. 133
Bibbee, M. Jane: III-2, p. 48
Biederman, Irving & Tsao: IV-6, p. 138
Billingsley, Felix F.: IV-11, p. 183
Billington, M.J.: IV-5, p. 124
Bingham, Geoffrey: IV-8, p. 148
Bisanz, Jeffrey, et al.: IV-5, p. 132
Bjurstrom, Dixie Potter: V-7, p. 249
Blachowicz, Camille L.Z.: IV-10, p. 178
Black, F. William: IV-14, p. 195
Black, John B.: IV-5, p. 120; IV-10, p. 169
Blackwell, Scott L.: IV-6, p. 139
Blake, Joseph A., et al.: III-2, p. 53
Blake, Kathryn: IV-9, p. 156
Blair, Timothy R.: II-7, p. 25; V-11, p. 272
Blair, Timothy R. & Raths: V-13 a, p. 280
Bleakley, Joseph J. & Johnsen: IV-10, p. 167
Blomenberg, Paula: V-2, p. 232
Bloom, Paul A.: IV-9, p. 159
Blumenthal, Gary B. & Robbins: IV-5, p. 118
Blumenthal, Joseph: III-12, p. 85
Boegli, R. Glen & Wasik: V-6, p. 244
Boersma, Frederick J.: IV-18, p. 219
Bonnycastle, Dale E.: VI-2, p. 302
Bonynge, Thomas T.: IV-3, p. 106
Boone, Katherine E.: IV-3, p. 104
Boothe, Lorraine M. & McIver: V-8, p. 254
Borich, Gary D.: II-5, p. 19
Boston, Ray: III-10, p. 81
Bouwhuis, Don & Bouma: IV-9, p. 165
Bower, Gordon H., et al.: IV-5, p. 120
Bower, Gordon H.: IV-10, p. 169
Bowling, Noel, et al.: II-5, p. 19
Bowman, Clair Michael & Fillos: IV-15, p. 208
Boysen, Vicki: II-3, p. 13
Brackman, Barbara: V-11, p. 269
Braddock, Kenneth Mackenzie: III-2, p. 49
Braddock-Rogers, Kenneth & Braddock: III-2, p. 49
Bradley, John: III-3, p. 60; III-3, p. 61
Bradley, John M., et al.: V-13 c, p. 287
Bradley, Karla R., et al.: V-9, p. 258
Bradley, L. & Bryant: IV-7, p. 140
Bradley, Robert H.: V-6, p. 247
Braggett, E.J.: V-4, p. 236
Brannigan, Gary C.: IV-18, p. 222
Brecht, Richard D.: IV-3, p. 105
Breed, Becky: V-13 b, p. 282
Breed, J. Scott: IV-15, p. 206
Brekke, Beverly: V-4, p. 234; V-5, p. 240
Brentnall, Lynn C.: IV-3, p. 104
Brenton, Beatrice White & Gilmore: IV-14, p. 204
Bridge, Connie A., et al.: IV-10, p. 167
Brinkman, Erwin H. & Sutton: V-5, p. 240
Britton, Bruce K., et al.: IV-3, p. 102; IV-5, p. 114

Britton, Bruce K.: IV-5, p. 120
Britton, Gwyneth E. & Lumpkin: V-9, p. 264
Brooks, Clarence Rae: V-13 b, p. 282
Brophy, Jere: II-5, p. 17
Brophy, Jerre E.: IV-15, p. 207
Broussard, E. Joseph: III-1, p. 29
Brovald, Walter H.: III-2, p. 54
Brown, Ann L. & Smiley: IV-5, p. 123
Brown, Ann L., et al.: IV-5, p. 126
Brown, Dorotha H.: IV-17, p. 215
Brown, Garth H.: IV-10, p. 166
Brown, Joan: V-11, p. 268
Brown, Lou: VI-3, p. 305
Brown, Merril: IV-17, p. 214
Brown, R. Michael: IV-4, p. 110
Browne, Karen: III-1, p. 32
Browne, Thomas, et al.: IV-13, p. 187
Browning-Crinion, Christine, et al.: IV-9, p. 165
Browns, Freda: VI-2, p. 301
Bruininks, Virginia L.: IV-18, p. 220
Brumfield, Shannon: VI-2, p. 303
Bryant, N. Dale: IV-3, p. 106
Bryant, P.E.: IV-7, p. 140
Buddenbaum, Judith M.: III-1, p. 27
Bulcock, Jeffrey W., et al.: IV-15, p. 208
Burgin, Ann: IV-18, p. 221
Buriel, Raymond: IV-3, p. 103
Burke, Jacob, et al.: V-4, p. 234
Burnham, Robert J.: III-15, p. 93
Burnhill, Peter: III-3, p. 61
Burns, Roger G. & Rupiper: III-2, p. 45
Burrows, Evelyn Honor & Neyland: V-136, p. 287
Busch, Lawrence: III-16, p. 93
Bush, Andrew J.: II-5, p. 18
Busse, Thomas V. & Seraydarian: IV-13, p. 187
Butler, Brian & Hains: IV-9, p. 165
Butter, Eliot J., & Vallano: IV-4, p. 110
Butterfield, Lawrence H., Jr.: VI-1, p. 300
Buttery, Thomas J. & Powell: II-5, p. 18
Byers, Joe L.: IV-5, p. 129

C

Cahan, Leonard S.: IV-5, p. 113
Caldwell, Edward C., et al.: V-9, p. 265
Calfee, Robert C.: II-5, p. 21
Calfee, Robert C. & Drum: II-5, p. 22; V-5, p. 241
Call, Patricia E.: V-8, p. 251
Callison, Patricia R.: III-8, p. 72
Campbell, Anne: V-9, p. 263
Campbell, Dorothy: IV-9, p. 163; IV-14, p. 205
Campbell, Jack: VI-3, p. 305
Campbell, Patricia: III-2, p. 36
Campbell, Richard L.: II-3, p. 12
Caramazza, Alfonso, et al.: IV-8, p. 149
Cardell, Douglas: III-4, p. 62
Carducci-Bolchazy, Marie: V-4, p. 234; V-9, p. 261
Carey, Robert F.: V-13 c, p. 292
Carpenter, Dale & Carpenter: V-13 b, p. 286
Carpenter, Patricia A. & Just: IV-6, p. 139
Carpenter, Ray L.: III-6, p. 66
Carpenter, Sue: V-13 b, p. 286
Carr, Thomas H., et al.: IV-9, p. 164
Carsetti, Janet: IV-18, p. 218
Carter, John F.: IV-5, p. 112
Carter, Juliet Mason: IV-16, p. 211
Carter, Sylvia M.: IV-16, p. 209
Carver, Ronald: IV-19 p. 223
Cassata, Mary B.: III-6, p. 67
Cassidy, Jack: V-2, p. 233
Ceci, Stephen J.: IV-6, p. 139
Cera, Mary Jane: IV-10, p. 167
Chabot, Robert J.: IV-6, p. 134
Chall, Jeanne S.: II-3, p. 11; V-5, p. 241
Chall, Jeanne S., et al.: III-2, p. 40
Chambliss, Jack: IV-18, p. 218
Chapman, James W. & Boersma: IV-18, p. 219
Charles, Don C.: III-2, p. 39
Charles, Jeff, et al.: III-2, p. 59
Chavez-Oller, Mary Anne: IV-8, p. 151
Chesterfield, Ray: V-5, p. 237
Chiang, Chun: IV-6, p. 137
Chihara, Tetsuro, et al.: IV-8, p. 151
Chisholm, Diane & Knafle: IV-9, p. 156
Chodos, Laura & Mosenthal: IV-10, p. 166
Chow, Peter C.P., et al.: IV-5, p. 122
Christe, James F.: IV-11, p. 181
Christiaansen, Robert E., et al.: IV-5, p. 129
Christopherson, Steven L.: IV-10, p. 178
Ciborowski, Tom: IV-4, p. 109
Cicirelli, Victor G.: IV-13, p. 187
Clements, Paul: IV-10, p. 178
Clifton, Rodney A.: IV-15, p. 208
Clymer, Carol: V-8, p. 251
Coady, James M.: IV-10, p. 174
Coben, Marla: V-11, p. 275
Cohen, Adir: III-2, p. 36
Cohen, Elaine Landau & Poppino: V-13 c, p. 291
Cohen, Elaine Landau & Smith-Gold: V-8, p. 254
Cohen, Elizabeth G., et al.: II-7, p. 25
Cohen, Karen M.: IV-20, p. 225
Cohen, Marshall: VI-2, p. 303

Cohen, Richard B. & Bradley: V-6, p. 247
Cohen, Ronald L. & Netley: IV-14, p. 198
Cohn, Marvin & D'Alessandro: IV-11, p. 183
Coke, Esther U.: IV-8, p. 148
Coker, Homer: II-5, p. 15
Cole, Michael: III-9, p. 76
Coleman, J.E.: IV-9, p. 160
Coles, Gerald S.: IV-14, p. 196
Coley, Joan D.: VI-2, p. 304
Colligan, Robert C.: V-13 b, p. 285
Collins, Karen W.: V-8, p. 255
Coltheart, Max: IV-5, p. 133
Condry, Sandra M., et al.: IV-9, p. 155
Conlon, Thomas F., et al.: V-13 d, p. 293
Connallon, Peter F., Jr.: V-11, p. 277
Connor, Robert: IV-14, p. 200
Connor, Ulla & Read: V-12, p. 279
Conzemius, William C.: IV-9, p. 153
Cooke, Paul A.: IV-11, p. 185
Cooper, James: IV-9, p. 157
Cope, R.G. & Morris: II-2, p. 9
Cornish, I.M.: IV-5, p. 118
Coulter, Cynthia L.: IV-15, p. 207
Courtney, Brother Leonard: IV-8, p. 151
Courtney, Dan & Schell: IV-2, p. 99
Cowling, Marianne: III-11, p. 83
Covington, Helen C. & Mountain: V-8, p. 252
Cozzens, Christine: III-2, p. 47
Craik, Fergus I.M.: IV-5, p. 122
Crandall, Kathleen F.: VI-2, p. 304
Crandall, Rick & Thompson: III-4, p. 63
Cranfield, G.A.: III-10, p. 80
Cranno, William D.: V-13 b, p. 281
Crawford, John, et al.: IV-15, p. 207
Crawley, Sharon: V-6, p. 248
Creswell, Thomas J.: III-2, p. 59
Crist, Robert L. & Petrone: IV-5, p. 127
Crocker, Robert K.: V-5, p. 238
Cromer, Gerald: III-15, p. 91
Cronin, Carmody M.: IV-6, p. 139
Crow, Thomas A.: IV-2, p. 101
Culbertson, Hugh M.: III-11, p. 84
Culbertson, Hugh M.: III-11, p. 84
Cullinan, Douglas: IV-14, p. 203
Cummins, Ann: V-13 b, p. 282
Cummins, James & Das: IV-5, p. 124
Cunningham, Claude H.: IV-3, p. 106
Cunningham, Donald J.: IV-5, p. 121
Cunningham, James W. & Cunningham: V-13 c, p. 290
Cunningham, Mitsuko Mitzi: IV-4, p. 107
Cunningham, Patricia M. & Cunningham: IV-21, p. 227
Cunningham, Patricia M.: V-6, p. 248
Cunningham, Patricia M.: V-13 c, p. 290
Currie, Janice L.: IV-5, p. 122
Curry, Cheryl: IV-3, p. 102
Curtis, Dwight W. & Elkins: IV-14, p. 199
Cutler, Marion B.: III-2, p. 38
Cuvo, Anthony J.: VI-3, p. 307

D

Dabbert, Debbie: V-13 b, p. 282
D'Alessandro, Cynthia: IV-11, p. 183
D'Angelo, Karen & Wilson: IV-11, p. 181
Dank, Marion & McEachern: IV-8, p. 146
Dansereau, Donald F., et al.: V-8, p. 255
Das, J P.: IV-5, p. 124
Daugherty, Kathryn M.: VI-1, p. 300
Davelaar, Eileen, et al.: IV-5, p. 133
David, Jane L. & Pelavin: V-13 e, p. 293
Davidson, Brian J.: IV-9, p. 164
Davies, Ann Marie: III-2, p. 42
Davies, Graeme: IV-19, p. 224
Davis, Carol A.: II-5, p. 19
Davis, Dennis: III-15, p. 92
Davis, Johnny: IV-5, p. 114
Davis, J. Kent & Annis: V-8, p. 256
Davis, Lindsey: III-3, p. 61
Davis, M.: II-1, p. 6
Dean, Raymond S.: IV-1, p. 99; V-12, p. 278
Dean, Raymond S. & Kulhavy: IV-8, p. 141
DeBoth, Carol J. & Dominowski: IV-4, p. 108
Defries, J.C., et al.: IV-14, p. 202
Delaney, Harold D.: IV-5, p. 121
Dempsey, June: V-8, p. 252
Demuth, Dennis M.: IV-9, p. 153
Deni, James R.: IV-5, p. 118
Denner, Peter R.: IV-5, p. 113; IV-5, p. 116
Dennis, Everette E.: III-1, p. 26
Depierro, Joseph: IV-19, p. 224
DeSanti, Roger J.: IV-11, p. 180
Desberg, Peter: IV-9, p. 156; IV-9, p. 157
Desmond, Robert W.: III-10, p. 80
Devine, Tom G.: IV-8, p. 147
Devlin, Robert J.: V-9, p. 264
DeWeerdt, C.J. & VanRijn: IV-1, p. 96
Diekhoff, George: V-8, p. 255
Dieterich, Daniel J.: I, p. 3
DiLollo, Vincent: IV-6, p. 134
DiVesta, Francis J.: IV-5, p. 114
DiVesta, Francis J., et al.: IV-10, p. 167
Dixon, Carol N.: II-5, p. 22
Docter, Robert: III-8, p. 72
Doctorow, Marleen, et al.: IV-10, p. 174
Doehring, Donald G.: IV-1, p. 99
Doehring, Donald G., et al.: VI-2, p. 302

Dollinger, Roberta A. & Walker: V-4, p. 236
Dolmetsch, Robert: IV-9, p. 165
Dominick, Joseph R.: III-2, p. 51
Dominowski, Roger L.: IV-4, p. 108
Domnie, Mildred & Brown: VI-3, p. 305
Donohue, Thomas R. & Glasser: III-2, p. 54
Dooling, D. James: IV-5, p. 129
Dorle, Jeanne: IV-18, p. 217
Douglas, Ann: III-2, p. 46
Douglas, Barbara: V-13 b, p. 282
Downey, Ronald G.: IV-18, p. 220
Downing, John, et al.: III-8, p. 73
Downing, John: IV-14, p. 196; V-5, p. 240
Doyle, Robert E., et.al.: V-11, p. 276
Drahozal, Edward C. & Hanna: V-13 e, p. 294
Drake, C.: IV-1, p. 95
Drum, Priscilla A.: II-5, p. 22; V-5, p. 241
Drum, Priscilla A.: IV-10, p. 171
Drummond, Robert J.: IV-18, p. 220
Dubbs, Mary Wray: V-2, p. 232
Duchastel, Philippe C.: IV-5, p. 117
Duchastel, Philippe: IV-5, p. 128
Duelfer, Arlene: II-3, p. 13
Duffelmeyer, Frederick A.: IV-14, p. 201
Dunne, Eugene E. & L'Abate: III-2, p. 46
Dupuis, Mary M.: II-3, p. 12
Dupuis, Mary M. & Askov: II-2, p. 9
Dupuis, Mary M.: V-13 c, p. 291
Durban, Elizabeth D.: IV-4, p. 108
Durkin, Dolores: V-3, p. 233
Dutton, R.: IV-5, p. 131
Dworkin, Nancy E.: II-5, p. 20
Dwyer, Carol: III-8, p. 73
Dwyer, Edward J.: IV-8, p. 148

E

Eagleeye, Daniel: IV-10, p. 177
Eamon, Douglas B.: IV-10, p. 170
Eanet, Marilyn G.: V-8, P. 253
Eberwein, Lowell D.: III-3, p. 60
Eden, Donna Z.: III-2, p. 38, p. 39
Editor & Publisher: III-5, p. 66
Edwards, V.K.: IV-8, p. 146
Egeland, Byron & Schrimpf: IV-14, p. 194
Eggen, Paul: IV-5, p. 126
Eggen, Paul D., et al.: IV-10, p. 170
Ehri, Linnea C.: IV-9, p. 152
Ehri, Linnea C. & Wilce: IV-9, p. 153; IV-9, p. 161
Eichorn, John: IV-13, p. 187
Einseidel, E.F. & Bibbee: III-2, p. 48
Ekstrom, Ruth B.: V-13 d, p. 293
Elashoff, Janet D.: IV-5, p. 113
Elgart, Denise B.: IV-11, p. 181
Elkind, David: V-5, p. 241
Elkins, John & Davies: IV-19, p. 224
Elkins, Wallace: IV-14, p. 199
Elliott, Philip: III-2, p. 58
Ellis, N.C. & Miles: IV-12, p. 186
Elwood, Harry: III-1, p. 28
Emery, Michael & Emery: III-2, p. 55
Emery, Suzanne Steiner: III-2, p. 55
Endo, Masaomi, et al.: IV-1, p. 95
Engel, R. & Fay: IV-1, p. 97
Engin, Ann W.: IV-17, p. 215
Engle, Randall W. & Durban: IV-4, p. 108
Entin, Eileen B. & Klare: IV-19, p. 223; V-13 c, p. 290
Entwisle, Doris R. & Hayduk: IV-15, p. 205
Epstein, Lee: V-11, p. 273
Epstein, Michael H.: IV-14, p. 203
Erickson, D., et al.: IV-9, p. 161
Eswara, H.S. & Krishnamurthy: III-1, p. 29
Evans, Beth Defratis: IV-10, p. 171
Evans, Geoff: II-1, p. 6
Evans, Ronald V.: IV-10, p. 175
Evans, Ronald V. & Ballance: V-13 c, p. 291
Evans, Selby H.: V-8, p. 255
Everett, Francis L.: IV-4, p. 108
Evertson, Carolyn: II-5, p. 17; IV-15, p. 207

F

Fabian, Bernhard: III-12, p. 86
Fairbanks, Marilyn M.: V-6, p. 248
Fairweather, Peter G.: IV-10, p. 166
Falcon, Luis Nieves: III-2, p. 42
Farnham-Diggory, Sylvia: IV-21, p. 229
Farr, Roger, et al.: V-2, p. 231
Farr, Roger & Tone: V-2, p. 232
Farr, Roger: V-2, p. 232
Farr, Roger & Blomenberg: V-2, p. 232
Fass, Warren & Schumacher: IV-5, p. 123
Favat, André F.: IV-16, p. 209
Fay, Leo: V-2, p. 231
Fay, W.: IV-1, p. 97
Featherston, James: III-2, p. 51
Feindler, Eva L.: V-8, p. 253
Feitelson, Dina: III-8, p. 73
Feldman-Summers, Shirley: III-15, p. 91
Fenwick, Geoff & Evans: II-1, p. 6
Fenwick, Sara Innis: III-13, p. 87
Ferguson, Anthony W.: III-7, p. 70
Ferreiro, Emilia: IV-8, p. 143
Ferris, Donald P.: IV-10, p. 168
Field, Sheila: IV-13, p. 188

Fillbrandt, James R. & Merz: V-13 f, p. 298
Fillos, Rita M.: IV-15, p. 208
Finger, Elyse: IV-14, p. 198
Finnegan, Shirley D.: IV-7, p. 141
Fischer, Susan D.: VI-2, p. 303
Fischler, Ira & Bloom: IV-9, p. 159
Fisher, Carol J. & Natavella: IV-16, p. 211
Fisher, Dennis F.: IV-1, p. 95
Fisher, Dennis F.: IV-20, p. 226
Fisher, Virginia Lee: IV-6, p. 136
Fishman, Anne Stevens: IV-8, p. 149
Fitzgerald, Ellen F.: IV-13, p. 191
Fitzgerald, Frances: III-2, p. 47
Fitzgerald, Gisela G.: V-9, p. 265
Fitzgerald, M.J.: III-13, p. 89
Fitzgerald, Thomas P. & Fitzgerald: IV-13, p. 19
Fitzgerald, Thomas P.: V-13 f, p. 298
Fleming, James T.: IV-9, p. 158
Fletcher, Jack M.: V-13 b, p. 283
Foch, T.T.: IV-14, p. 202
Fogelman, K.: IV-13, p. 192
Folk, Mary C. & Campbell: VI-3, p. 305
Foreman, P.J.: V-11, p. 268
Forester, Anne: I, p. 3
Forman, Susan G.: IV-3, p. 103
Forness, Steven R., et al.: IV-14, p. 204
Foster, Jeremy J.: IV-19, p. 223
Fowler, Bill & Kroll: V-13 e, p. 295
Fowler, Bridget: III-2, p. 48
Fowler, Gilbert Len, Jr.: III-2, p. 51; III-3, p. 60
Fox, Anne C. & Franke: II-5, p. 19
Fox, Barbara J. & Beezer: V-1, p. 230
Fox, Paul A.: IV-5, p. 118
Fox, Sharon E.: III-1, p. 30
Fraim, Susan R.: IV-16, p. 209
Francis, Leslie: III-14, p. 89
Franke, Mary: II-5, p. 19
Fransson, A.: IV-5, p. 123
Franzen, Ann McGill: VI-2, p. 304
Frary, Robert B.: IV-3, p. 105
Frase, Lawrence T.: IV-3, p. 101
Frase, Lawrence T. & Schwartz: IV-19, p. 223
Fraser, Barry J. & Northfield: IV-16, p. 211
Frasher, James M.: IV-16, p. 212
Frasher, Ramona S. & Frasher: IV-16, p. 212
Frasher, Ramona S.: IV-16, p. 213
Freeman, Barry A. & Beasley: IV-14, p. 200
Freeman, Evelyn B. & Wolfgang: IV-3, p. 107
Fremouw, William J. & Feindler: V-8, p. 253
French, Valarie W.: III-2, p. 40
Friedman, Judith B. & Gillooley: VI-2, p. 302
Friedman, Leslie J.: III-2, p. 37
Frith, Uta: IV-13, p. 189
Froese, Victor: IV-8, p. 150
Fry, Edward, et al.: IV-19, p. 224
Fry, Maurine A.: IV-13 b, p. 286
Fuchs, Douglas: V-11, p. 271
Fuller, Renee: IV-3, p. 104
Furukawa, James M.: IV-10, p. 173
Fusaro, Joseph A.: IV-9, p. 153

G

Gabbard, Carl: V-4, p. 234
Gagne, Ellen D.: IV-5, p. 117
Gagne, Ellen D. & Memory: IV-10, p. 169
Gajar, Anna: VI-4, p. 307
Galen, Nancy D.: V-11, p. 273
Gall, Meredith D., et al.: IV-5, p. 113
Gallagher, Jeanette McCarthy: IV-3, p. 107
Gamez, Gloria I.: V-12, p. 278
Garcia, Jesus: III-2, p. 41
Garland, John: V-8, p. 255
Garner, W.R. & Haun: IV-6, p. 137
Garrity, Linda T.: IV-1, p. 98
Garvey, Catherine: IV-8, p. 149
Gawn, Janet: III-15, p. 92
Geiselman, Ralf E. & Glenny: IV-9, p. 163
Geller, Evelyn: III-13, p. 88
Genesee, Fred: V-12, p. 278
Geyer, John J.: IV-12, p. 185
Geyer, L.H.: IV-6, p. 136
Gickling, Edward E. & Armstrong: IV-11, p. 180
Gillis, John Stuart & Sidlauskas: IV-14, p. 194
Gillooley, William B.: VI-2, p. 302
Gilmore, Doug: IV-14, p. 204
Gilmore, Stan: V-7, p. 249
Gingrich, Patricia S.: IV-10, p. 177
Glasser, Theodore L.: III-2, p. 54
Glavin, William A., Jr.: III-15, p. 93
Glazer, Susan Mandel & Morrow: IV-8, p. 142
Glenny, Janet: IV-9, p. 163
Gligorijević, B.: IV-5, p. 131
Glock, Marvin D.: IV-10, p. 176
Glover, John A.: IV-5, p. 128
Glynn, Shawn M.: IV-5, p. 131
Godfrey, John R.: V-13 e, p. 294

Goehlert, Robert: III-6, p. 67
Gold, Martin: IV-13, p. 188
Golding, Peter & Murdock: III-16, p. 95
Golinkoff, Roberta Michnick: IV-9, p. 160
Goodacre, Elizabeth J.: I, p. 3; II-2, p. 8
Goodenough-Trepagnier, Cheryl & Smith: IV-8, p. 149
Goolkasian, Paula: IV-1, p. 96
Gordon, Thomas F. & Verna: III-1, p. 27
Gormley, Kathleen A. & Franzen: VI-2, p. 304
Goss, Albert E.: IV-5, p. 128
Gottlieb, Bernard: V-11, p. 276
Gottlieb, Marvin I.: IV-14, p. 194
Gourley, Judith W.: V-9, p. 259
Graesser, Arthur C.: IV-8, p. 150
Graney, Marshall: III-2, p. 35
Granger, Robert C.: II-1, p. 5
Grant, Grace E. & Tierney: III-8, p. 73
Grant, Patricia L.: V-13 c, p. 292
Gray, Bowman: II-5, p. 17
Gray, Roland F.: V-10, p. 266
Gredler, Gilbert R.: IV-14, p. 193
Green, Barbara & Hurwitz: III-2, p. 52
Greene, Edith: IV-10, p. 167
Greenlaw, M. Jean: V-13 e, p. 296
Greenlaw, M. Jean: III-2, p. 44
Greenlaw M. Jean & Wielan: IV-16, p. 209
Griffin, Peg: V-1, p. 231
Griggs, Richard A.: IV-10, p. 176
Grober, Ellen: IV-8, p. 149
Groff, Patrick: IV-7, p. 140; IV-9, p. 154, p. 158; V-5, p. 241
Grosjean, Francois H. & Lass: IV-12, p. 185
Gross, Alice Dzen: IV-2, p. 100
Gross, Harriet: III-2, p. 49
Gross, K., et al.: IV-1, p. 95
Grotta, Gerald L.: III-14, p. 90
Growse, Rosemary: V-10, p. 267
Grundin, Hans U., et al.: IV-8, p. 151
Grunig, James E.: III-2, p. 53
Gupta, Raj, et al.: IV-6, p. 139
Guthrie, Donald: IV-14, p. 204
Guthrie, John T.: III-4, p. 62; IV-21, p. 229; V-10, p. 266
Gwinn, Paula B.: III-4, p. 62

H

Haber, Ralph Norman: IV-20, p. 226
Haberlandt, Karl & Bingham: IV-8, p. 148
Haddock, Maryann: V-5, p. 239
Haggard, Martha Rapp & Meeks: II-4, p. 14
Haggard, Martha Rapp: V-11, p. 275
Hagin, Rosa A.: IV-14, p. 204
Hagin, Rosa A., et al.: V-11, p. 274
Hahn, William G.: IV-3, p. 104
Haines, G.F.: IV-9, p. 152
Hains, Sylvia: IV-9, p. 165
Hale, F. Dennis: III-2, p. 50, 54
Hale, Robert L., et al.: V-13 b, p. 282
Hale, Robert L.: V-13 b, p. 283
Hall, Cynthia R.: III-2, p. 40
Hall, James W., et al.: IV-5, p. 127
Hall Kathryn V., et al.: IV-4, p. 109
Hall, Robert J.: IV-14, p. 204
Halloran, James D.: III-9, p. 27
Halteman, John: III-8, p. 71
Hanna, Gerald S. & Johnson: V-13 e, p. 295
Hanna, Gerald S. & Oaster: IV-10, p. 169; IV-21, p. 229
Hanna, Gerald S.: V-13 e, p. 294
Hansell, T. Stevenson: V-6, p. 247
Hansen, Karen M., et al.: IV-8, p. 150
Hanson, Raymond H.: IV-13, p. 189
Harber, Jean R.: IV-3, p. 101
Hardyck, Curtis: IV-8, p. 145
Harlow, Steven D.: V-4, p. 234
Harnage, Philip L.: II-4, p. 15
Harris, Albert J.: IV-1, p. 98; IV-14, p. 195
Harris, Albert J. & Jacobson: IV-19, p. 223
Harris, Jerry: V-5, p. 237
Harris, Louis: III-4, p. 64
Harris, N.D.C. & Kirkhope: III-6, p. 68
Harrison, Marilyn: VI-3, p. 307
Harste, Jerome C. & Strickler: II-7, p. 24
Harste, Jerome C.: IV-11, p. 180
Hart, Zwi: IV-14, p. 197
Hartgen, Stephen: III-2, p. 56
Hartlage, Lawrence C. & Boone: IV-3, p. 104
Hartlage, Lawrence C. & Steele: V-13 b, p. 281
Hartlage, Lawrence: V-13 b, p. 282
Hartley, James, et al.: III-3, p. 61
Hashway, Robert & Nuttall: III-8, p. 74
Hatta, Takeshi: IV-1, p. 97
Haun, Forrest: IV-6, p. 137
Haupt, Edward J., et al.: V-11, p. 275
Hauser, Carl: III-2, p. 48
Havemeyer, Eugenie: IV-10, p. 171
Haviland, Virginia: III-13, p. 88
Hawkins, Harold L.: IV-9, p. 164
Hawkins, Michael L.: III-2, p. 40
Hayes, John R.: IV-5, p. 130

Hayes-Roth, Barbara & Thorndyke: IV-10, p. 175
Hayouk, Leslie Alec: IV-15, p. 205
Hayward, Kristina G.: IV-10, p. 167; V-8, p. 252
Heathington, Betty S.: IV-16, p. 213
Hedge, Ann & Davies: III-2, p. 42
Heerman, Charles E. & Callison: III-8, p. 72
Heft, Carl S.: V-13 c, p. 288
Heikkinen, Charles A.: III-14, p. 89
Helfeldt, John P. & Lalik: V-6, p. 244
Heller, F.P.: IV-5, p. 122
Helson, Ravenna: IV-18, p. 216
Henderson, Leslie: IV-5, p. 133
Hendrickson, Jo, et al.: V-11, p. 271
Hendrickson, Joe D. & Uhrig: VI-2, p. 302
Henney, Maribeth & Boysen: II-3, p. 13
Henry, John A.: V-5, p. 238
Henry, Susan E.: V-11, p. 270
Hering, Jackie: III-4, p. 64
Herndon, Mary Anne: IV-5, p. 121
Heron, Timothy E. & Axelrod: IV-9, p. 157
Hess, Robert J.: V-9, p. 258
Hicks, Ronald G. & Broussard: III-1, p. 29
Hicks, Ronald G. & Featherston: III-2, p. 51
Hill, Charles H.: V-5, p. 237
Hill, Margaret: III-2, p. 35
Hill, Suzanne D.: IV-14, p. 195
Hill, Walter: V-13 f, p. 298
Hinsley, Dan A., et al.: IV-5, p. 130
Hirst, Lois T. & O'Such: V-11, p. 276
Hittleman, Daniel R.: V-9, p. 263
Hobbie, Barbara: III-2, p. 52
Hocevar, Susan Page & Hocevar: IV-11, p. 182
Hocevar, Dennis: IV-11, p. 182
Hochberg, Julian: IV-20, p. 225
Hodge, June: IV-9, p. 164
Hoffman, James Y.: IV-11, p. 183
Hogaboam, Thomas W. & Perfetti: IV-9, p. 162
Hogaboam, Thomas: IV-14, p. 198
Hogben, David: V-10, p. 266
Hoge, Robert D.: IV-13, p. 193
Holbrook, Morris B.: IV-19, p. 224, p. 225
Holland, Norman N.: IV-21, p. 227
Hollander, Sheila K.: IV-5, p. 112
Holley, Charles D.: V-8, p. 255
Hollingsworth, Paul M.: V-11, p. 269
Hollstein, Milton: III-10, p. 81
Holman, Jacqueline & Brackman: V-11, p. 269
Holmlov, P.G.: III-2, p. 58
Hood, Joyce: II-5, p. 20
Hook, Pamela Evans & Johnson: IV-8, p. 150
Hooper, Ann C.: III-4, p. 62
Hoover, Mary Rhodes: IV-15, p. 207
Hopkins, H.R.: III-9, p. 76
Hori, Tadas: IV-1, p. 95
Horii, Yoshiyuki & Cooke: IV-11, p. 185
Horne, Marcia D.: II-1, p. 4
Hoskisson, Kenneth: V-5, p. 241
Howatt, A.P.R.: III-9, p. 76
Howlett, Nancy & Weintraub: II-5, p. 22
Hughes, Andrew S. & Johnston-Doyle: II-6, p. 23
Hughes, John R.: IV-1, p. 99
Humes, Ann: IV-10, p. 177
Hummel, Thomas J.: IV-8, p. 150
Humphreys, Lloyd G.: IV-3, p. 106
Humphreys, Michael S.: IV-5, p. 125
Hung, Daisy L.: IV-9, p. 160
Hunnes, Frank: V-6, p. 243
Hunt, Adrianne P. & Reuter: V-9, p. 264
Hur, K. Kyoon: III-1, p. 31
Hurwitz, Leon: III-2, p. 52
Husen, Torsten: V-2, p. 233
Hutchison, Laveria F.: V-8, p. 258
Hyde, Margaret A.: V-9, p. 265
Hynd, Cynthia R.: IV-14, p. 200
Hynd, George W. & Obrzut: IV-1, p. 98
Hynd, George W., et al.: IV-14, p. 200
Hynds, Ernest C. & Kibler: III-11, p. 83

I

Ikeda, Mitsuo & Saida: IV-12, p. 186
Ilika, Joseph & Longuion: V-8, p. 257
Ingraham, Murray J.: V-6, p. 246
International Reading Association Evaluation Committee: II-7, p. 25
Interracial Books for Children: III-2, p. 39
Intili, Jo-Ann K.: II-7, p. 25
Irvine, J.: V-11, p. 268
Irwin, Betty C.: IV-4, p. 109
Isakson, Richard L.: IV-9, p. 159; IV-11, p. 182

J

Jackson, Peter F.: V-13 a, p. 280
Jackson, Shirley M.: III-2, p. 41
Jacobs, Ellen: V-13 b, p. 281
Jacobson, Milton D.: IV-19, p. 223
Jacobson, Milton D., et al.: V-9, p. 260

Jansen, Mogens: III-8, p. 73
Jeffries, Leo W. & Hur: III-1, p. 31
Jenkins, J.R.: II-1, p. 7
Jenkins, Joseph R. & Pany: V-13 d, p. 292
Jensen, Marjane & Beck: V-13 d, p. 293
Jeroski, Sharon: I, p. 3
Johns, Jerry L. & Wheat: III-3, p. 60
Johnsen, E. Peter: IV-10, p. 167
Johnson, Dale M.: III-14, p. 90
Johnson, Darwin & Wen: V-8, p. 253
Johnson, David A. & Wollersheim: IV-14, p. 197, p. 203
Johnson, Doris J.: IV-8, p. 150
Johnson, Fred R.: V-13 e, p. 295
Johnson, Michael G.: IV-10, p. 179
Johnson, Neal F. & Marmurek: IV-9, p. 163
Johnson, R.K.: III-3, p. 61
Johnson, Sandra: II-5, p. 16
Johnston, James C.: IV-6, p. 135
Johnston, James C.: IV-9, p. 163
Johnston-Doyle, Kimber: II-6, p. 23
Jolly, Thomas: IV-5, p. 127
Jonasson, Jon Torfi: IV-5, p. 133
Jones, Larry D.: III-1, p. 31
Jongsma, Eugene A.: II-1, p. 3
Jongsma, Eugene A.: IV-16, p. 212
Jongsma, Eugene A., et al.: V-13 a, p. 279
Jorden, R.R.: IV-16, p. 214
Jorgenson, Gerald W., et al.: IV-13, p. 188
Judge, Robert E.: IV-4, p. 110
Judy, Stephen & Judy: II-6, p. 24
Judy, Susan: II-6, p. 24
Juola, James F., et al.: IV-6, p. 134
Just, Marcel Adam: IV-6, p. 139

K

Kail, Robert V., Jr.: IV-5, p. 132
Kail, Robert V., Jr. & Marshall: IV-12, p. 186
Kamil, Michael L. & Hanson: IV-13, p. 189
Kamm, Karlyn: V-6, p. 243
Kaplan, Frank L.: III-10, p. 82
Karahalios, Sue M., et al.: V-6, p. 246
Karmen, Andrew: III-2, p. 55
Kasbohm, Mary: V-11, p. 271
Katims, Michael: V-11, p. 270
Kaufman, Shlomit: III-2, p. 43
Kauchak, Don: IV-5, p. 126
Kauchak, Don, et al.: IV-5, p. 126
Kauchak, Donald P.: IV-10, p. 170
Kazanas, H.C., et al.: IV-4, p. 109
Keeling, B.: V-7, p. 249
Keenan, Thomas F.: IV-5, p. 129
Keetz, Mary A.: V-9, p. 264; V-13 a, p. 280
Kellaghan, Thomas: IV-15, p. 207
Kemppainen, Ritva: III-8, p. 73
Kibby, Michael W.: IV-11, p. 179
Kibler, Dan: III-11, p. 83
Kieras, David E.: IV-10, p. 174
Kiesling, Herbert: V-14, p. 298
Kilmann, Peter R., et al.: V-11, p. 270
King, David J.: IV-5, p. 119
King, Terrie: III-2, p. 53
Kingston, Albert J. & Lovelace: III-14, p. 89
Kintsch, Walter & Green: IV-10, p. 167
Kirk, Sandra, et al.: IV-5, p. 126
Kirk, Sandra: IV-5, p. 126; IV-10, p. 170
Kirkhope, S.M.: III-6, p. 66
Kirkland, C. Eric: V-9, p. 260
Kirsch, Irwin S.: II-5, P. 21
Kister, Ken: III-6, p. 66
Klare, George R.: IV-19, p. 223; V-13 c, p. 290
Klein, Alice E.: V-13 b, p. 284
Klein, Ann E.: V-4, p. 236
Klein, Howard A.: IV-2, p. 101
Klein, Nancy: IV-13, p. 188
Kleinman, Glenn M. & Schallert: IV-8, p. 147
Kleinstein, Robert N.: VI-1, p. 300
Kletzing, Karen: IV-10, p. 168
Kline, F. Gerald: III-1, p. 30
Kling, Martin & Tivenan: III-4, p. 63
Kling, Martin: IV-10, p. 179
Klinge, Valerie: IV-14, p. 197
Knafle, June D.: III-2, p. 34; IV-9, p. 156
Knell, Susan & Winer: III-15, p. 92
Koenke, Karl: IV-17, p. 214
Koff, Elissa: III-8, p. 73
Kolers, Paul A.: IV-20, p. 225
Kosmoski, Georgia J. & Vockell: V-10, p. 266
Kozminsky, Ely: IV-10, p. 173
Kozol, Jonathan: III-9, p. 78
Kratochwill, Thomas R., et al.: IV-9, p. 153
Kraut, Robert E.: IV-18, p. 217
Kraus, Sidney & Daris: III-15, p. 92
Krieling, Albert: III-10, p. 80
Krippner, Stanley: IV-7, p. 140
Krishnamurthy, Nadig: III-1, p. 29
Kroll, Barry M.: V-13 e, p. 295
Krueger, Lester E.: IV-9, p. 157
Krulee, Gilbert K., et al.: IV-10, p. 166
Krumhansl, Carol L.: IV-6, p. 138
Kuhn, Donald M.: IV-1, p. 95
Kukuk, Christopher: III-8, p. 74
Kulhavy, Raymond W.: IV-8, p. 141
Kumar, V.K.: IV-13, p. 188
Kuo, Eddie C.Y.: III-1, p. 33

Kurth, Ruth Justine: V-9, p. 262
Kushner, Deanie: VI-5, p. 308
Kuya, Dorothy: III-2, p. 40
Kyle, Diane: III-2, p. 36

L

L'Abate, Luciano: III-2, p. 46
Laffey, James: II-5, p. 19
LaFiura, Dennis: III-2, p. 54
Lahey, Benjamin B.: IV-14, p. 199
Lahnston, Anton: II-3, p. 13
Lahr, Donald: III-8, p. 72
Laishley, Jennie: III-2, p. 42
Lalik, Rosary: V-6, p. 244
Lamarre, Gilbert O.: IV-16, p. 212
Lamberg, Walter J.: II-3, p. 13; IV-11, p. 184
Lamme, Linda L.: IV-8, p. 143
Lanberts, Frances: VI-3, p. 306
Landy, Sarah: IV-16, p. 213
Lange, Bob: V-13 e, p. 297
Langer, Judith: IV-8, p. 151
Lantaff, Roger E.: IV-10, p. 168
Lapidus, Deborah: III-2, p. 47
Lapkin, Sharon & Swain: IV-8, p. 144
Lapp, Diane, et al.: II-3, p. 13
Larkin, Ernest F. & Grotta: III-14, p. 90
Larson, Jean: V-9, p. 260
Lash, Neil A.: IV-4, p. 109
Lass, Norman J.: IV-12, p. 185
Laughlin, James E.: V-11, p. 270
Lawton, Sallie Q.C.: IV-5, p. 126
Lazdowski, Walter P.: IV-13, p. 190
Lee, Alan J.: III-10, p. 81
Lee, Joyce W.: II-3, p. 12
Lee, Raymond S.H.: III-2, p. 55
Lee, San-Chul: III-2, p. 57
Lefton, Lester A., et al.: IV-1, p. 95; IV-14, p. 199
Legenza, Alice: V-6, p. 246
Legenza, Alice & Knafle: III-2, p. 34
Leisman, Gerald & Schwartz: IV-1, p. 98
Lennox, Kathleen: IV-14, p. 197
Lennox, W.H., et al.: V-7, p. 249
Lent, John A.: III-1, p. 33, p. 34
Lent, John A. & Rao: III-2, p. 56
Leonard, H. Skipton: IV-18, p. 229
Leonard, William H.: V-9, p. 259, p. 263
Leong, C.K.: IV-14, p. 203
Leong, C.K. & Haines: IV-9, p. 152
Lesgold, Alan M.: IV-10, p. 172
Lesiak, Judi: V-3, p. 234; V-13 b, p. 284
Levi, Gabriel & Musatti: IV-8, p. 147
Levin, Florence S. & Lindbeck: III-2, p. 46
Levin, Joel R. & Lesgold: IV-10, p. 172
Levy, Anita: IV-9, p. 155
Levy, Betty Ann: IV-10, p. 178
Lewandowski, Glen: V-9, p. 260
Lewitter, F.I.: IV-14, p. 202
Lewy, Rafael: V-4, p. 234
Ley, Ronald: IV-5, p. 132
Leyman, Laretha: V-11, p. 274
Liberman, Isabelle Y.: IV-14, p. 195
Library Journal: III-5, p. 65
Lindbeck, Joy S.: III-2, p. 46
Lindman, Ralf: IV-8, p. 145
Lindsey, Jimmy D., et al.: V-9, p. 264
Lindsley, Ogden R.: VI-4, p. 308
Ling, Agnes H.: VI-2, p. 302
Linguistic Reporter, The: V-12, p. 278
Lippman, Lorna: III-2, p. 43
Lipton, Jack P. & Liss: II-2, p. 9
Lipton, Patrick: V-8, p. 255
Liss, Jody A.: II-2, p. 9
Literacy Discussion: III-9, p. 77
Lloyd, Dee Norman: IV-14, p. 200
Lockheed, Marlaine E.: V-13 d, p. 293
Long, Margaret: III-2, p. 35
Longuion, Bonnie: V-8, p. 257
Lorentz, Jeffrey L. & Coker: II-5, p. 15
Lorimer, Rowland, et al.: III-2, p. 35
Lorton, Mary & Kukuk: III-8, p. 74
Lotto, Linda S.: V-5, p. 241
Louisa, Valentino: IV-18, p. 221
Lovelace, Terry L.: III-14, p. 89
Lowery, Lawrence F. & Leonard: V-9, p. 259, p. 263
Lowry, Dennis T.: III-16, p. 94
Luce, Sally R. & Hoge: IV-13, p. 193
Luce, Terrence S. & Johnson: III-14, p. 90
Luiten, John, et al.: III-3, p. 61
Lukasevich, Ann & Gray: V-10, p. 266
Lukatela, G., et al.: IV-5, p. 130, p. 131
Lumpkin, Margaret C.: V-9, p. 264
Lundberg, I., & Torneus: IV-8, p. 144
Lupke, Rolf: III-2, p. 40
Luther, Tama W.: V-9, p. 264
Lutz, Hartmut: III-2, p. 42
Lyon, Reid: IV-7, p. 140
Lyons, Arthur W., et al.: IV-8, p. 142
Lystad, Mary: III-2, p. 37; III-13, p. 88

M

Mabee, W. Scott, et al.: V-8, p. 255
MacCann, Donnarae: III-2, p. 34
Mack, Faite Royjier-Poncefonte: III-9, p. 75
Mackworth, Norman H.: IV-11, p. 184
MacLellan, Barbara: III-2, p. 35

MacNaughton, Dolores: IV-8, p. 147
Madaus, George F., et al.: IV-15, p. 207
Magee, John W.: V-11, p. 275
Magiste, Edith: IV-8, p. 143
Maguire, T.O.: IV-13, p. 192
Maier, Peter: III-2, p. 58
Malgady, Robert G. & Johnson: IV-10, p. 179
Mallett, Jerry: III-2, p. 35
Mangieri, John N.: V-9, p. 261
Mangieri, John N. & Olsen: IV-18, p. 217
Mangold, Sally S.: VI-1, p. 300
Mann, Margaret: III-4, p. 62
Manning, Diane: V-11, p. 273
Manning, Diane Thompson: V-8, p. 257
Manzo, Anthony V.: V-7, p. 250
Marcus, Lee: IV-4, p. 111
Margolis, Howard: V-13 b, p. 284
Margolis, Howard & Brannigan: IV-18, p. 222
Margolis, Howard, et al.: IV-18, p. 221
Marin, Oscar S.M.: IV-1, p. 96
Maring, Gerald H.: V-6, p. 241
Marjoribanks, Kevin: IV-15, p. 208
Marks, Carolyn: IV-10, p. 174
Marmurek, Harvey H.C.: IV-9, p. 163
Marsh, George: IV-21, p. 229
Marsh, George, et al.: IV-9, p. 157
Marsh, George & Desberg: IV-9, p. 156
Marshall, Christine V.: IV-12, p. 186
Marshall, George M.: IV-9, p. 264
Marshall, Nancy & Glock: IV-10, p. 176
Marshall, Robert C., et al.: VI-5, p. 308
Martin, Maryanne: IV-21, p. 229
Martin, Warren S.: III-1, p. 31
Martin, Wendy K.: III-1, p. 31
Martindale, Colin: III-2, p. 47; IV-21, p. 230
Marzano, Robert J., et al.: V-9, p. 260
Masciantonio, Rudolph: V-6, p. 248
Masland, Richard L.: IV-1, p. 98
Masland, Susan W.: IV-8, p. 146
Mason, George & Mize: V-16, p. 299
Massaro, Dominic: IV-21, p. 227
Massaro, Dominic W., et al.: IV-6, p. 138; IV-9, p. 157
Mathewson, Grover C.: IV-1, p. 215
Matihaldi, Hilkka-Liisa: III-8, p. 73
Matta, Fernando Reyes: III-11, p. 84
Mattingly, I.G.: IV-9, p. 161
Mavrogenes, Nancy A. & Galen: V-11, p. 273
May, William W., et al.: IV-5, p. 118
Mayer, Richard E.: IV-5, p. 115
Mayzner, M.S.: IV-9, p. 165
McAdam, Judith A.: IV-13, p. 189
McAulay, J.D.: III-2, p. 43
McCarthy, Cavan: III-7, p. 69
McCaughey, Mark W.: IV-6, p. 134
McClelland, James L. & Johnston: IV-9, p. 163
McCleneghan, J. Sean: III-15, p. 91
McClure, Audrey T.: VI-2, p. 303
McCombs, Maxwell E. & Shaw: III-15, p. 93
McConaughy, Stephanie H.: IV-9, p. 155
McConkie, George W.: IV-20, p. 225, 226
McConkie, George W. & Zola: IV-20, p. 226
McCutcheon, Gail, et al.: III-2, p. 36
McDonald, Barbara A.: V-8, p. 265
McEachern, William: IV-8, p. 146
McFarland, Carl E., Jr. & Rhodes: IV-5, p. 118
McGovern, Jill E.: IV-7, p. 139
McIntire, Walter G. & Drummond: IV-18, p. 220
McIntyre, Curtis W., et al.: IV-6, p. 139
McIver, Ann E.: V-8, p. 254
McKenna, Michael: IV-5, p. 117
McKeon, Christine A. & McKeon: V-10, p. 267
McKeon, John W.: V-10, p. 267
McKinney, Ann Watts: IV-15, p. 206
McKinney, James D. & Forman: IV-3, p. 103
McMahon-Rideout, Margaret: IV-9, p. 155
Meeks, Jane Warren: II-4, p. 14
Meeks, Jane W. & Morgan: IV-13, p. 192
Memory, David: IV-10, p. 169; V-13 f, p. 298
Mendelsohn, Harold: III-1, p. 28
Meredith, Keith & Vaughan: V-13 c, p. 289
Meredith, Keith E.: V-13 c, p. 289
Merricks, Anne R. & Crocker: V-5, p. 238
Merritt, Sharyne & Gross: III-2, p. 49
Merz, William R.: V-13 f, p. 298
Messe, Lawrence A., et al.: V-13 b, p. 281
Messe, Susan K.: V-13 b, p. 281
Mewhort, D.J.K. & Beal: IV-9, p. 164
Meyer, Bonnie J.F.: IV-5, p. 111
Meyer, David E.: IV-5, p. 132
Meyers, Linda: II-3, p. 13
Michael, William B.: V-13 b, p. 287
Mikulecky, Larry: V-6, p. 242
Miles, J., et al.: V-11, p. 268
Miles, T.R.: IV-12, p. 186
Millard, Joseph: V-13 b, p. 286
Miller, G.R. & Coleman: IV-9, p. 160
Miller, John W.: II-1, p. 5
Miller, John W. & Rand: II-3, p. 14
Miller, John W. & Isakson: IV-9, p. 159; IV-11, p. 182

Miller, Maurice, et al.: IV-3, p. 105
Miller, Raymond B., et al.: IV-5, p. 121
Miller, William H.: V-13 b, p. 285
Miskiewicz, Rosemarie: IV-5, p. 127
Mize, John M.: V-16, p. 299
Modieski, Richard B. & Michael: V-13 b, p. 287
Moers, Fran & Harris: V-5, p. 237
Mokros, Janice R. & Koff: III-8, p. 73
Moncman, Mary & Mallett: III-2, p. 35
Montgomery, Christine A.: IV-10, p. 173
Monteith, Mary K: IV-21, p. 228; V-8, p. 255
Moody, Mark: IV-9, p. 159
Moon, Cliff & Wells: III-8, p. 71
Moore, David, et al.: V-13 f, p. 298
Moore, Michael: III-2, p. 49
Moore, Robert B.: V-9, p. 263
Moore, Warren D., et al.: IV-3, p. 104
Moreau, Paul Henri & Pfister: III-2, p. 45
Morgan, Raymond F.: IV-13, p. 192
Morris, A.: II-2, p. 9
Morris, C. Donald: IV-5, p. 127
Morris, Joyce M.: II-5, p. 17
Morris, Linda: IV-3, p. 107
Morrow, Lesley M.: IV-8, p. 142
Mosberg, Ludwig: IV-9, p. 160
Moseley, Caroline & Moseley: IV-8, p. 147
Moseley, David: IV-8, p. 147
Mosenthal, Peter: IV-5, p. 112
Mosenthal, Peter: IV-10, p. 166
Mountain, Lee: V-6, p. 248; V-8, p. 252
Moyer, Sandra B.: V-11, p. 277
Muia, Joseph: II-5, p. 19
Muller, Douglas: IV-18, p. 217
Muller, Douglas, et al.: IV-18, p. 218
Murdock, Graham: III-16, p. 95
Murphy, Kathleen R.: IV-4, p. 109
Murray, Cheryl Gay: IV-5, p. 127
Murray, Frank B.: IV-3, p. 105
Murray, Mary Carmel: III-2, p. 52
Murray, Michael E.: IV-6, p. 139
Musatti, Tullia: IV-8, p. 147
Mustaffa-Kedah, Omar: III-9, p. 77
Myatt, Barbara & Carter: IV-16, p. 211
Myers, David S.: III-2, p. 49
Myers, Meyer II & Paris: IV-17, p. 214

N

Nahem, Joseph: IV-7, p. 140
Narang, Harbans Lal: II-1, p. 7
Natarella, Margaret A.: IV-16, p. 211
Neely, Malcolm D. & Lindsley: VI-4, p. 308
Negley, Harold H.: V-2, p. 231
Neimann, Joan: V-8, p. 255
Nelson, Nancy Wong & Geyer: IV-12, p. 185
Netley, Charles: IV-14, p. 198
Neville, Donald D. & Vandever: VI-3, p. 305
Neville, Mary H. & Pugh: V-6, p. 243, 247
New Society: III-5, p. 65
Neyland, Della: V-13 b, p. 287
Ngandu, Kathleen M.: V-15, p. 299
Nicholls, John G.: IV-18, p. 219
Nichols, Nancy J. & McKinney: IV-15, p. 206
Nicholson, Tom: IV-11, p. 182
Nickjoo, Mahvash: III-9, p. 77
Nilagupta, Sirirat: IV-8, p. 145
Niles, Jerome A. & Taylor: IV-9, p. 154
Nolan, John D., et al.: IV-10, p. 171
Northfield, Jeffrey R.: IV-16, p. 211
Nunn, Clyde Z.: III-4, p. 63
Nurss, Joanna R.: V-4, p. 234
Nuttall, Ronald L.: III-8, p. 74

O

Oakland, Thomas: V-5, p. 239
Oaster, Thomas R.: IV-10, p. 169; IV-21, p. 229
Obrzut, John E.: IV-1, p. 97
Obrzut, John E.: IV-1, p. 98; IV-14, p. 200
O'Donnell, Holly: V-14, p. 299
Offenbach, Stuart I.: IV-14, p. 196
Ogletree, Earl J.: V-4, p. 236
Ognijević, P.: IV-5, p. 131
Ognjenović, P.: IV-5, p. 130
O'Keefe, Garrett J. & Mendelsohn: III-1, p. 28
O'Kelly, Charlotte G.: III-10, p. 80
Olejnik, Shirley: IV-8, p. 146
Olivier, Donald C.: IV-6, p. 136
Oller, John: IV-8, p. 151
Olsen, Henry D.: IV-18, p. 217
Olshavsky, Jill Edwards: IV-11, p. 180
Olshavsky, Jill Edwards & Kletzing: IV-10, p. 168
Omaggio, Alice C.: IV-5, p. 131
Omotoso, Sam O. & Lamme: IV-8, p. 143
O'Reilly, Robert P. & Streeter: V-13 c, p. 288
Orlando, Vincent P.: IV-10, p. 167
Orlando, Vincent P. & Hayward: V-8, p. 252
O'Rourke, William J.: III-8, p. 71
Orwig, Gary W.: IV-5, p. 121

O'Such, Twila: V-11, p. 276
Otto, Jean: IV-11, p. 183
Owens, Justine, et al.: IV-10, p. 169
Ozaki, Michael: IV-15, p. 206

P

Paletz, David L. & LaFiura: III-2, p. 54
Panackal, Abraham A. & Heft: V-13 c, p. 288
Pany, Darlene: V-13 d, p. 292
Paris, Scott G.: IV-17, p. 214
Park, Rosemarie: IV-6, p. 135
Park, Soji & Arbuckle: IV-9, p. 161
Parker, Timothy: IV-6, p. 135
Patton, James E. & Offenbach: IV-14, p. 196
Pearson, P. David: V-5, p. 241
Peeck, J., et al.: IV-5, p. 128
Pehrsson, Robert: IV-8, p. 151
Pelavin, Sol H.: V-13 e, p. 293
Pellegrino, James W.: IV-5, p. 132
Peng, Samuel S., et al.: II-5, p. 17
Perfetti, Charles A.: IV-9, p. 162
Perfetti, Charles A., et al.: IV-14, p. 198
Perlman, Daniel: III-2, p. 46
Perry, Fred L.: IV-5, p. 121
Peters, Charles W.: V-13 e, p. 296
Petersen, Chris: IV-5, p. 128
Peterson, David A. & Eden: III-2, p. 38
Peterson, David A.: III-2, p. 39
Peterson, George V.: V-13 b, p. 283
Peterson, Joe, et al.: V-13 e, p. 296
Peterson, Nedra: IV-18, p. 221
Peterson, Sophia: III-11, p. 83
Peterson, Wayne: V-4, p. 234
Petrone, Joseph M.: IV-5, p. 127
Pfister, Guenther G.: III-2, p. 45
Phillips, David: VI-5, p. 308
Pick, Anne D.: IV-6, p. 134
Piehl, Jochen: III-14, p. 90
Piha, Alan: IV-5, p. 114
Pikulski, John J. & Kirsch: II-5, p. 21
Pikulski, John J.: IV-6, p. 134
Pittman, Bettie: IV-9, p. 158
Plake, Barbara S.: V-13 e, p. 296
Plas, Jeanne: IV-4, p. 109
Plessas, Gus P.: I, p. 3
Poindexter, Paula M.: III-15, p. 93
Pollack, Cecelia, et al.: IV-7, p. 140
Pollak, Denise: IV-6, p. 136
Pollock, John Crothers, et al.: III-2, p. 52
Popp, Helen M.: V-5, p. 240
Poppino, Mary: V-13 c, p. 291
Porter, Don: V-13 c, p. 289
Porter, Robert J.: IV-14, p. 195
Posnansky, Carla J. & Rayner: IV-6, p. 138; IV-9, p. 162
Posser, G.V.: IV-5, p. 115
Potts, George R.: IV-21, p. 228
Potts, Marion & Leyman: V-11, p. 274
Pound, Ronald E.: V-13 a, p. 279
Powell, Jack V.: II-5, p. 18
Prakash, Joy: III-2, p. 50
Pratt, Donald F. & Goss: IV-5, p. 128
Prendergast, John F.: II-7, p. 26
Price, Marianne: V-11, p. 275
Pritchard, Allyn & Taylor: V-11, p. 277
Propst, Ivan K., Jr. & Baldauf: V-13 c, p. 291
Pugh, A.K.: V-1, p. 231
Purcell, Dean G.: IV-9, p. 154
Purves, Alan C.: IV-14, p. 197

Q

Quartararo, Lucie: III-2, p. 56
Quealy, Roger: II-4, p. 15
Quorn, Kerry Charles & Yore: V-4, p. 235

R

Rae, Gordon: IV-4, p. 108
Radwin, Eugene: III-2, p. 40
Rakow, Ernest A.: IV-15, p. 207
Ralls, Elizabeth M.: V-13 b, p. 286
Ramig, Christopher J. & Granger: II-1, p. 5
Rand, David C.: II-3, p. 14
Randel, Mildred A., et al.: V-13 b, p. 286
Rao, Shanti: III-2, p. 56
Ratekin, Ned: IV-8, p. 142; V-11, p. 272
Raths, James D.: V-13 a, p. 280
Ray, Jean M.: III-6, p. 67
Rayner, Keith: IV-6, p. 138; IV-20, p. 225
Rayner, Keith: IV-9, p. 162
Rayward, W. Boyd: III-13, p. 87
Read, Charles: V-12, p. 279
Readence, John E.: IV-10, p. 170
Readence, John E.: IV-11, p. 182
Readence, John E. & Baldwin: IV-18, p. 222
Reder, Lynne M.: IV-10, p. 176
Reed, Kathleen: IV-10, p. 176
Reggi, David R.: III-8, p. 73
Reich, Carol M. & Reich: V-9, p. 261
Reich, Peter A.: V-9, p. 261
Reitsma, Pieter: IV-6, p. 137
Rennick, Philip M., et al.: IV-14, p. 197
Resnick, Daniel P. & Resnick: III-9, p. 75

Resnick, Lauren B.: III-9, p. 75
Reuter, Janet R.: V-9, p. 264
Reynolds, Cecil R. & Hartlage: V-13 b, p. 282
Reynolds, Fred D., et al.: III-1, p. 31
Reynolds, Ralph E., et al.: IV-5, p. 116
Rezba, Richard: II-3, p. 13
Rhodes, Deborah D.: IV-5, p. 118
Rice, William: V-13 b, p. 281
Rich, H. Lyndall & Bush: II-5, p. 18
Richards, Larry G. & Heller: IV-5, p. 122
Richardson, J. & Brown: V-11, p. 268
Richek, Margaret A.: V-5, p. 241
Richey, D. Dean: IV-3, p. 105
Richman, Lynn C.: IV-3, p. 105
Rickards, John P. & Denner: IV-5, p. 113, 116
Rickards, John P.: IV-5, p. 114, 116
Ries, Paul: III-16, p. 94
Rips, Lance J., et al.: IV-8, p. 149
Ritter, David R.: V-11, p. 271
Rittgarn, Gwen: V-13 b, p. 282
Robbins, Donald: IV-5, p. 118
Robbins, Susan Hurevitz: II-7, p. 25
Roberts, Michael: V-11, p. 271
Robin, Ellen Page: III-2, p. 37
Robinson, H. Alan: IV-8, p. 151
Robinson, James Lee, Jr.: III-2, p. 52
Robinson, John P.: III-1, p. 29
Robinson, Richard D., et al.: II-2, p. 8
Robyak, James E.: V-8, p. 256
Robyak, James E. & Downey: IV-18, p. 220
Roettger, Doris, et al.: V-13 b, p. 286
Rogers, JoAnn V.: II-1, p. 6
Romanow, W.I. & Soderlund: III-2, p. 59
Ronning, Royce R.: IV-5, p. 128
Root, Sheldon L., Jr.: III-2, p. 44
Rosenblatt, Louise M.: IV-21, p. 227
Rosenshine, Barak & Meyers: II-3, p. 13
Rosenshine, Barak Victor: V-14, p. 299
Roser, Nancy L.: I, p. 3
Ross, Campbell: IV-16, p. 211
Roth, Sandra W.: V-9, p. 265
Rothenberg, S.: IV-1, p. 95
Rothkopf, E.Z. & Billington: IV-5, p. 124
Rourke, Byron P.: IV-14, p. 194
Rowls, Michael: I, p. 3
Rubenstein, Herbert: IV-8, p. 142
Rubin, Barry: III-11, p. 83
Rubin, Bernard: III-1, p. 27
Rubin, David C.: IV-5, p. 117, 120
Rubin, Gail & Maier: III-2, p. 58
Rubin, Rosalyn & Balow: IV-15, p. 206
Rubin, Rosalyn A., et al.: IV-18, p. 217
Rubin, Rosalyn A.: IV-18, p. 218
Rugel, Robert P.: IV-14, p. 199
Ruhland, David, et al.: IV-13, p. 188
Rupiper, Omer J.: III-2, p. 45
Rupley, William H.: II-5, p. 16
Rupley, William H. & Blair: II-7, p. 25; V-11, p. 272
Rupley, William H. & Gwinn: III-4, p. 62
Rush, Robert J. & Klare: V-13 c, p. 290
Rutter, Michael: IV-13, p. 193
Ryan, Frank L.: IV-5, p. 124
Ryan, John: III-8, p. 72
Ryle, Anthony & MacDonald: IV-17, p. 216

S

Sabaroff, Rose E., & Frary: IV-3, p. 105
Saffran, Eleanor M. & Marin: IV-1, p. 96
Sagaria, Sabato D. & DiVesta: IV-5, p. 114
Saida, Shinya: IV-12, p. 186
Sakamoto, Takahiko: III-8, p. 73; IV-8, p. 151
Salomon, Gavriel: IV-21, p. 229
Samuels, S. Jay: V-11, p. 270
Sandhu, H.S.: III-7, p. 69
Sandhu, R.K. & Sandhu: III-7, p. 69
Sandidge, Susanne: IV-18, p. 217
Santa, Carol: IV-5, p. 125
Santa, Carol Minnick & Santa: IV-5, p. 133
Santa, John L., et al.: IV-5, p. 125
Santa, John L.: IV-5, p. 133
Santeusanio, Richard P.: V-9, p. 262
Sarvan, Charles Ponnuthurai: III-2, p. 43
Sassenrath, Julius M.: V-6, p. 245
Satariano, William A.: III-5, p. 65
Satz, Paul: IV-1, p. 98
Satz, Paul & Fletcher: V-13 b, p. 283
Savić, M.: IV-5, p. 131
Savić, M.D.: IV-5, p. 130
Sawyer, Diana J.: III-8, p. 70
Say, Michael W.: IV-15, p. 206
Scarbro, Harold: V-11, p. 270
Schadler, Margaret: IV-5, p. 134
Schallert, Diane L.: IV-8, p. 147
Scheirer, Mary Ann & Kraut: IV-18, p. 217
Schell, Leo M.: IV-2, p. 99
Schellenberg, James & Halteman: III-8, p. 71
Schenck, Susan J.: VI-4, p. 308
Schmidt, Eunice L.: IV-8, p. 152
Schneider, Donald: V-11, p. 276
Schneider, Henry G.: IV-5, p. 118
Schneider, Michael A. & Spivack: V-13 b, p. 284
Schnell, Thomas R.: V-8, p. 257

Scholes, Robert J., et al.: VI-2, p. 303
Schottenfeld, S.: IV-1, p. 95
Schreiner, Robert: IV-8, p. 150
Schreiner, Samuel A., Jr.: III-10, p. 78
Schrimpf, Vicki: IV-14, p. 194
Schubert, Delwyn G.: II-6, p. 23
Schuerman, Lawrell E., et al.: III-2, p. 39
Schumacher, Gary M.: IV-5, p. 123
Schvaneveldt, Roger W., et al.: IV-5, p. 132
Schwarting, F. Gene & Schwarting: V-13 b, p. 282
Schwarting, Kathleen R.: V-13 b, p. 282
Schwartz, Barry J.: IV-19, p. 223
Schwartz, Geraldine J.: V-11, p. 273
Schwartz, Joddy: IV-1, p. 98
Schwartz, Judy I.: VI-2, p. 304
Scott, Kathryn P. & Feldman-Summers: III-15, p. 91
Scott, Ralph: V-5, p. 239
Scotton, James F.: III-10, p. 82
Scribner, Sylvia & Cole: III-9, p. 76
Sears, Robert R., et al.: III-2, p. 47
Seaton, Hal W. & Aaron: IV-17, p. 215
Seaton, Hal W.: V-13 f, p. 298
Selden, Ramsay W.: V-9, p. 260
Semlak, William D.: III-1, p. 30
Seraydarian, Louisa: IV-13, p. 187
Shaffer, Gary: II-5, p. 19
Shankweiler, Donald & Liberman: IV-14, p. 195
Shaw, Donald L.: III-15, p. 93
Shaw, Eugene F.: III-1, p. 32
Sheare, Joseph B.: IV-18, p. 219
Shelton, Keith: III-1, p. 29
Sherizen, Sanford: III-2, p. 51
Shimizu, Akinori: IV-1, p. 95
Shoben, Edward J.: IV-8, p. 149
Shore, Larry: III-2, p. 59
Shores, Richard E.: V-11, p. 271
Shugg, Roger W.: III-12, p. 86
Sidlauskas, Agatha E.: IV-14, p. 94
Siegel, Alexander W.: IV-5, p. 132
Silva, Georgette & Montgomery: IV-10, p. 172
Silver, Archie A., et al.: IV-14, p. 204
Silver, Archie A.: V-11, p. 274
Silverstein, A.B.: V-13 e, p. 297
Simon, Herbert A.: IV-5, p. 130
Simonton, Dean Keith: III-16, p. 94
Singer, Murray: IV-5, p. 133
Singer, S.M.: IV-14, p. 202
Singletary, Michael W.: III-2, p. 52
Singletary, Michael W. & Cowling: III-11, p. 83
Siple, Patricia, et al.: VI-2, p. 303
Siskind, Theresa G.: III-4, p. 64
Skovira, Robert: III-2, p. 36
Skurnik, W.A.E.: III-2, p. 58
Slater, Alan M.: IV-6, p. 139
Sloboda, John A.: IV-13, p. 190
Small, J.J.: V-7, p. 249
Smiley, Sandra S.: IV-5, p. 123, 126
Smith, Arthur E.: II-2, p. 7
Smith, Clarissa K., et al.: IV-4, p. 108
Smith, Culver H.: III-10, p. 79
Smith, Edward E.: IV-5, p. 125; IV-8, p. 149
Smith, Frank: IV-8, p. 149
Smith, Helen K.: I, p. 3
Smith, Jeffrey K. & Katims: V-11, p. 270
Smith, Keith: III-12, p. 87
Smith-Burke, Margaret, et al.: IV-10, p. 177
Smith-Gold, David A.: V-8, p. 254
Sobkov, Joan & Moody: IV-9, p. 159
Sobotka, Karen R., et al.: IV-14, p. 195
Society for the Advancement of Education: III-1, p. 31; III-2, p. 38
Soderlund, W.D.: III-2, p. 59
Sosanie, Arlene K. & Szybillo: III-1, p. 30
Southgate, Vera, et al.: II-5, p. 16
Sowell, Virginia & Burgin: IV-18, p. 221
Sparkes, Vernone M.: III-2, p. 50
Speidel, Gisela E.: V-4, p. 236
Spiegel, Mona R. & Bryant: IV-3, p. 106
Spiro, Rand J.: IV-5, p. 112
Spivack, George: V-13 b, p. 284
Stagg, David I.: IV-14, p. 199
Stanchfield, Jo M. & Fraim: IV-16, p. 209
Standiford, Sally N.: IV-5, p. 116
Stanley, Robert H. & Steinberg: III-1, p. 27
Stanovich, Keith E., et al.: IV-6, p. 136; IV-9, p. 154
Stanovich, Keith: IV-10, p. 177
Stanovich, Keith E. & West: IV-9, p. 159
Stansell, John C.: IV-11, p. 183
Stansell, John C., et al.: IV-11, p. 180
Stanton, George C.: IV-5, p. 113
Statsky, Bernard A.: IV-13, p. 187
Steddom, Susan Simonton: III-2, p. 35
Steele, Carol T.: V-13 b, p. 281
Steinaker, Norman & Harrison: VI-3, p. 307
Steinberg, Charles S.: III-1, p. 27
Steinborg, Danny D. & Yamada: IV-9, p. 160
Steiner, Karen: V-8, p. 257
Stempel, Guido H., III: III-16, p. 94
Sternberg, Les: IV-14, p. 203
Steuer, Loreli Olson & Steddom: III-2, p. 35
Stevenson, Harold W.: IV-6, p. 135

Stewart, Bob R.: IV-4, p. 109
Stewart, David W. & Morris: IV-3, p. 107
Stewart, David W. & Louisa: IV-18, p. 221
Stice, Carole Kirchner: IV-10, p. 172
Sticht, Thomas G.: III-9, p. 75; IV-21, p. 229
Stoodt, Barbara D. & Balbo: V-7, p. 251
Storck, Patricia A. & Cutler: III-2, p. 38
Storey, Denice C.: III-2, p. 38
Stotsky, Sandra L.: V-9, p. 259
Stowell, Marion Barber: III-12, p. 85
Strange, Michael: IV-14, p. 201
Streeter, Ronald E.: V-13 c, p. 288
Strickler, Darryl J.: II-7, p. 24
Stroman, Carolyn A. & Becker: III-1, p. 28
Strother, T. Ella: III-2, p. 41
Stuckless, E. Ross: VI-2, p. 304
Stump, Alan: III-2, p. 53
Sulzby, Elizabeth: IV-8, p. 143
Summers, Edward G., et al.: I, p. 3
Sutcliffe, Peter: III-12, p. 86
Sutton, Ruth H.: V-5, p. 240
Svensson, L.: IV-3, p. 102
Swain, Emma Halstead: IV-16, p. 210
Swain, Merrill: IV-8, p. 144
Swanson, Lee: IV-7, p. 141; IV-14, p. 202
Swindling, James A.: II-2, p. 10
Szybillo, George: III-1, p. 30
Szymczuk, Mike: V-11, p. 286

T

Taiwo, Oladele: V-1, p. 231
Tallal, Paula: IV-7, p. 140
Talmadge, Harriet & Walberg: V-9, p. 258
Tarnapol, Lester, et al.: IV-15, p. 206
Tarnopol, Muriel: IV-14, p. 196
Tarnopol, Muriel: IV-15, p. 206
Taylor, Barbara: IV-9, p. 154
Taylor, Glen A.: IV-6, p. 138; IV-9, p. 157
Taylor, Hugh: III-8, p. 73
Taylor, Jean: V-11, p. 277
Taylor, Mary Agnes: III-2, p. 34
Taylor, Nancy & Waynant: IV-16, p. 210
Teachers Training College Research Unit: IV-16, p. 214
Teale, William H.: V-3, p. 234
Tedesco, John L.: III-2, p. 47
Teer, Pallas: IV-8, p. 142
Tennessee Education Association: II-3, p. 11
Tew, Brian: V-13 e, p. 296
Thackray, Derek V.: III-8, p. 73
Thomas, James L.: IV-10, p. 172
Thompson, Bruce, et al.: IV-3, p. 106; IV-15, p. 206
Thompson, David C.: III-2, p. 56
Thompson, Richard W.: III-4, p. 63
Thomson, Douglas: III-8, p. 73
Thorndyke, Perry W.: IV-10, p. 175
Thorndyke, Perry W.: III-15, p. 92
Tibbetts, Sylvia-Lee: III-15, p. 92
Tierney, Dennis: III-8, p. 73
Tierney, Robert J.: IV-17, p. 214
Tierney, Robert J.: IV-10, p. 167; V-13 e, p. 296
Tips, Martha L.: V-13 a, p. 279
Tish, Geri: V-9, p. 260
Tivenan, Bonnie: III-4, p. 63
Todd, Rusty: III-2, p. 59
Tone, Bruce: V-2, p. 232
Tonjes, Marian J.: V-6, p. 246
Torgesen, Joseph K.: IV-14, p. 196, p. 202
Torneus, M.: IV-8, p. 144
Tovey, Duane R.: IV-13, p. 190
Towner, John C.: V-6, p. 246
Travers, Jeffrey R. & Oliver: IV-6, p. 136
Travers, Michael: V-2, p. 233
Tsao, Yao-Chung: IV-6, p. 138
Tulving, Endel & Watkins: IV-5, p. 125
Tunstall, Jeremy: III-1, p. 27
Turner, Ralph R.: V-9, p. 265
Turner, Terrence J.: IV-5, p. 120
Turvey, M.T.: IV-5, p. 130, 131; IV-9, p. 161
Tzeng, Ovid J.L., et al.: IV-9, p. 160

U

Uhlenbeck, R.W.F.: IV-5, p. 128
Uhrig, Elaine: VI-2, p. 302
Unoh, S.O.: V-2, p. 232
Usova, George M.: II-2, p. 10; IV-15, p. 205

V

Vacca, Richard T.: V-7, p. 249
Vallano, Terry W.: IV-4, p. 111
Valtin, Renate: IV-14, p. 195
Van Blaricom, Ginger: IV-5, p. 119
Vance, Doug & Quealy: II-4, p. 15
Van Dam, G.: IV-5, p. 128
Vandever, Thomas R.: VI-3, p. 305
Van Rees, C.J.: IV-10, p. 175
Van Rijn, A.J.: IV-1, p. 96
Van Rijnsoever, Raymond: IV-1, p. 97
Vaughan, Joseph L., Jr. & Meredith: V-13 c, p. 289

Vaughan, Sally, et al.: V-6, p. 248
Venezky, Richard L.: IV-21, p. 230
Venezky, Richard L.: IV-6, p. 138; IV-9, p. 157
Verdaasdonk, H. & Van Rees: IV-10, p. 175
Verna, Mary Ellen: III-1, p. 27
Vernon, M.D.: IV-14, p. 193
Vernon, McCay & Coley: VI-2, p. 304
Vernon, McCay & Hering: III-4, p. 64
Vig, Susan: IV-10, p. 171
Vockell, Edward L.: V-10, p. 266
Vodehnal, Sue: V-9, p. 260
Vukelich, Carol & McAdam: IV-13, p. 189

W

Waern, Yvonne: IV-10, p. 173
Wainman, H.: V-12, p. 212
Wakefield, James A., Jr.: IV-3, p. 106
Walberg, Herbert J.: V-9, p. 258
Walker, Charles Monroe: V-9, p. 260
Walker, David N.: V-4, p. 236
Walker, Maxine: III-2, p. 36
Walker, R.B.: III-10, p. 82
Wallborn, Fred H., et al.: IV-17, p. 215
Waller, T. Gary: IV-3, p. 106
Walsh, Brenda Frawley & Lanberts: IV-3, p. 306
Wanat, Stanley F.: IV-20, p. 226
Wang, William S-Y: IV-9, p. 160
Ward, Beatrice A.: IV-5, p. 113
Wasik, Barbara H.: V-6, p. 244
Watkins, Olga C.: IV-5, p. 125
Waynant, Priscilla Pilson: IV-16, p. 210
Weaver, David H. & Buddenbaum: III-1, p. 27
Weaver, Gail Cohen: V-13 c, p. 292
Weaver, Kelley: IV-8, p. 151
Weaver, Phyllis A.: IV-14, p. 195
Weber, Jane: IV-19, p. 224
Webster, Raymond E. & Schenck: VI-4, p. 308
Weeks, Thelma E.: IV-8, p. 142
Wehausen, Ellen: IV-5, p. 114
Wehmeyer, Lillian Biermann: III-13, p. 88
Weil, S.: III-6, p. 68
Weiner, Eva S.: V-11, p. 272
Weintraub, Sam: II-5, p. 22
Weintraub, Sam, et al.: I, p. 3
Weinstein, Carol S. & Weinstein: IV-13, p. 191
Weinstein, Neil D.: IV-13, p. 191
Wells, Gordon: III-8, p. 71
Wells, M. Garvain & Peterson: V-13 b, p. 283
Wells, Reese: IV-13, p. 188
Wen, Shih-Sung: V-8, p. 253
Wesoowska, Eugenia Anna: III-9, p. 76
West, Ellen M.: V-13 e, p. 297
West, Richard F.: IV-21, p. 228
West, Richard F.: IV-6, p. 136; IV-9, p. 154, 159
West, Richard F. & Stanovich: IV-10, p. 177
Westbrook, Robert D.: IV-3, p. 102
Westendorf, David H.: IV-4, p. 108
Western, Linda E.: IV-16, p. 210
Whale, John: III-1, p. 32
Whalley, Joyce I.: III-13, p. 89
Wheat, Thomas E.: III-3, p. 60
White, Donna Romano & Jacobs: V-13 b, p. 281
White, Hazel L.: IV-8, p. 146
White, Margaret: V-11, p. 268
White, Richard T.: IV-8, p. 148
Whorton, James E. & Algozzine: VI-3, p. 306
Whyte, Jean: V-11, p. 269
Wielan, O. Paul: IV-16, p. 209
Wiesendanger, Katherine Davis & Wollenberg: IV-5, p. 114
Wikoff, Richard L.: V-13 e, p. 294
Wilce, Lee S.: IV-9, p. 153
Wilcox, Leah: IV-16, p. 209
Wildman, Daniel M. & King: IV-10, p. 179
Wilkinson, Alex: IV-6, p. 135
Williams, Fern & Oakland: V-5, p. 239
Williams, John D.: V-4, p. 234
Williams, John D. & Brekke: V-5, p. 240
Williamson, Ann P.: IV-13, p. 187
Willows, Dale M.: IV-9, p. 161
Wilson, John A.: IV-2, p. 100
Wilson, LaVisa Cam: II-2, p. 8
Wilson, Molly M.: V-8, p. 258
Wilson, Peter: II-6, p. 24
Wilson, Robert M.: IV-11, p. 181
Wilson, Rose, et al.: IV-6, p. 135
Windhauser, John W. & Stemper: III-16, p. 94
Winder, Gerald A.: III-15, p. 92
Winger, Howard W.: III-12, p. 85
Winne, Philip H.: II-5, p. 18
Winne, Philip H.: IV-5, p. 113
Wittrock, M.C.: IV-10, p. 174
Wolf, Ann E. & Mikulecky: V-6, p. 242
Wolf, Ronald E.: V-6, p. 245
Wolfe, Vicki Fein & Cuvo: VI-3, p. 307
Wolfgang, Charles H.: IV-3, p. 102
Wollenberg, John Paul: IV-5, p. 114

Wollersheim, Janet P.: IV-14, p. 197, 203
Womack, Sandra: IV-5, p. 116
Wong, Bernice: IV-5, p. 122
Wood, Martha: IV-18, p. 218
Wooden, Sharon: IV-18, p. 217
Work, William: IV-8, p. 146
Wright, Gary: V-9, p. 265
Wright, Patricia: IV-21, p. 228
Wright, Sylvia Hart: III-6, p. 67

Y

Yamada, Jun: IV-9, p. 160
Yates, Jack: IV-8, p. 149
Yore, Larry Dean: V-4, p. 235
Young, Ann Venture: III-2, p. 41
Yule, William & Rutter: IV-14, p. 193

Z

Zais, Robert S.: II-1, p. 6
Zak, Itai & Kaufman: III-2, p. 43
Zimmer, John W., et al.: IV-5, p. 128
Zimmermann, Michael J. & Sassenrath: V-6, p. 245
Zinck, R. Ann: IV-8, p. 151
Zinkus, Peter W. & Gottlieb: IV-14, p. 194
Zirkel, Perry A. & Albert: II-3, p. 11
Zola, David: IV-20, p. 226